RADIO-PERCEPTION

THE JOURNAL OF THE
BRITISH SOCIETY OF DOWSERS

Vol. IX No. 67 MARCH, 1950

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JOURNAL OF THE
BRITISH SOCIETY OF DOWSERS

Vol. IX No. 67 March, 1950

NOTICES

Information regarding a "Scientific and Technical Congress of Radionics and Radiesthesia," to be held in London in May, is being sent to home members.

* * * *

The following books have been added to the Library :—
Prof. S. W. Tromp—Psychical Physics. 1949. 503 pages
"Enel"—Premiers Pas en Radiesthésie Thérapeutique. 1949. 109 pages.
Dr. Wilhelm Reich—The Discovery of the Orgone, Vol. II, The Cancer Biopathy. 1949. 405 pages.
Colson—Electronics in Medecine. 1949. 77 pages.
The "ibliography of the Divining Rod, 1100-1900 A.D.," which Dr. Westlake has kindly lent to the Society, can be seen at York House, Portugal Street.

* * * *

Radiations, by Mr. T. Bedford Franklin, is now on sale by the Society at the price of 8/6. A copy of the late Sir William Bragg's little book, *The Story of Electromagnetism*, will be presented to any member purchasing a copy of *Radiations*.

* * * *

The new edition of *Dowsing*, by Captain W. H. Trinder, is available at 7/6 to members and 10/- to non-members, post free ; obtainable from the Assistant Secretary.

* * * *

The Editor would be glad to hear from any member who would be willing to review copies of *Rivitsa Italiana di Radiestesia*.

* * * *

Contributions for the *Journal*, preferably in typescript, should be sent to the Editor at least five weeks before the first day of March, June, September and December if they are to appear in the respective *Journals* for those months.

* * * *

The Title Page and Contents of Vol. VIII can be obtained from the Editor on application.

* * * *

The price of new *Journals* to members, in excess of the free number, and of old *Journals*, is 2/- and 1/6 respectively.

Six free copies of the *Journal* will be given, on request, to writers of articles in it, in addition to the usual copy.

The Society's badges can be obtained from the Honorary Secretary for 1/3 post free.

* * * *

Communications for the Editor, and inquiries, should be sent to Colonel A. H. Bell, York House, Portugal Street, London, W.C.2.

* * * *

We much regret to record the death of Dr. Hector Munro on December 8th. He was an original member of the Society and in the early days meetings were held at his rooms at 12 Park Crescent.

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PART ONE

THE SEARCH FOR WATER: WHERE ARE WE?

Address given to the British Society of Dowsers on January 18th, 1950

BY COLONEL K. W. MERRYLEES, O.B.E.

Introducing the lecturer the Chairman said: Ladies and Gentlemen, some of you may remember the first address which our lecturer to-day gave us on December 2nd, 1936. On that occasion he told us about his methods and the dowsing he had done on active service on the N.W. Frontier of India. Since then he has dowsed for water in other parts of the world—in France during the early part of the last war, again in India, and more recently in Persia and in East Africa. You can see therefore that he is a dowser of great experience and is well qualified to entertain decided views on how dowsing should be carried out.

I think I should start this talk with a short explanation. I am going to talk only on the search for water, though that is closely related to the search for certain other conditions in the earth's surface, and I am not going to mention that rapidly growing medical branch which dowsing has recently grown and which, in the hands of qualified medical men and scientists, seems to be making such excellent progress that it therefore does not come in for much of the criticism which I shall now make of the parent tree.

I think we must all admit that in the eyes of the world, and particularly of the conventional scientific world, dowsing does not hold a very satisfactory position. That I am sure is generally true, although a number of dowsers have earned for themselves and their methods a great respect from those who have used their services.

Let me add at once that I think that the sum total of benefits derived from the employment of dowsers before wells are sunk far outweighs the total loss by failures due to mistakes by dowsers. I shall now examine how and why, in my opinion, dowsers frequently fail.

I place first on my list the inevitable occasional fallibility of the human machine. However careful the searcher may be and however wide his experience, I do not believe that he will not, at some time or other, run across conditions in which he is likely to make errors. Even the geologist or geophysicist is occasionally misled by a hidden fault and the engineer's project suffers therefrom, but my experience is that the geologist is much more careful than the dowser, and wisely generalises about what may exist below the surface, while the dowser is inclined to back his fancy to far too short odds and say " here at 103ft. you will get 9,543 gallons an hour of water free from salt, pollution or other

impurities." Far too often the result has been a partial or complete failure, and one such failure will discredit a dozen or more near-correct successes somewhere else.

I think that a great many dowsers have only a vague idea of the conditions in which water lies or moves in the ground beneath them, and therefore little idea of what a dowser might be able to infer from the indications he receives. To give the picture very briefly: A porous but unfissured subsoil, such as sandstone or coral, will have its minute pores filled by the rainfall which has time to infiltrate until the whole is filled up to the water table, a fluctuating surface depending on the comparative rate of withdrawing of the water by natural exits or overflowing or by pumping. The movement of such water is extremely slow, and I do not think that a dowser can locate such water except by a depth measurement. Both pervious and impervious strata may be, and usually are, fissured; and in old buried river beds in valleys filled by the weathering of the surrounding hills there are gravel layers of varying coarseness. In these cases there are movements of water along definite lines, seldom in open channels, but where the coarse gravel or frequent fissures permit movement more freely than in the surrounding soil, sand or rock. It is in the accurate location and description of such movements that the value of the dowser lies, but the whole problem is complicated by the fact that a succession of horizontal pervious and impervious layers may produce a number of aquifers, in any one of which the desirable movement of water may take place.

Professor S. W. Tromp, a geologist, in his new book *Psychical Physics*, refers to " so-called water veins, an expression used in all dowsing literature and which sounds ridiculous to a geologist." But the fact remains that there are subsoil flows through areas of comparative stagnation, as is so frequently shown by the extreme variation of wells quite close together, while fissure flows are the bane of the tunnelling engineer in almost any mountain range.

To locate accurately the centre line of a subsoil movement of water is to locate the best site for a well in that particular area.

Before he can develop a water supply in the most economical way, an engineer desires a considerable amount of information. He will want to know the whole course of the water movement through the area he is examining and its approximate depth throughout this course. He would like to know if there is more than one aquifer, and he must have all the available information about the strata below. Finally, he wants to know what quantity of water he may expect. From these data he can select the best drill or method of sinking the well and the right size of casing, diameter of well and type of strainer. To summarise, the dowser should report on subsoil strata, recommended site or sites, depth

and quantity. He should give the engineer the widest possible choice of site as there may be surface conditions, such as the siting of water points, of which the cost might be greatly affected by an unnecessary limitation of siting points.

Now I wish to dispose of a matter which is not technically dowsing but which is closely related to it. I consider that every dowser should have some knowledge of both geology and hydrology. Many dowsers neglect geology entirely, and some even despise it openly and consider it valueless. This, in my opinion, is on a par with an engineer neglecting the study of the steel or concrete which he proposes to incorporate in his project. I do not suggest that the dowser should acquire the elaborate vocabulary with which geology has surrounded itself, but he should be able to use the priceless information which the geologist has recorded in almost every quarter of the world, and would avoid many errors by so doing, as well as increasing many times the value of his report to the engineer.

The dowser must also satisfy himself that the water he predicts could be in the area. For this he must check that both the rainfall and the catchment area are adequate, and that his calculated percolation figure satisfies the demand.

Now I know that what I have just said can be attacked by those who can quote the countryman dowser who had probably never heard of geology, but I would reply that the countryman usually did not go far from his own area and therefore had not to apply his art to greatly varying conditions, but only to those with which he became fully familiar.

To others who may argue that their deductions can be made from rod indications which themselves are independent of the strata below, this is true to some extent, but I think most dowsers will apply a correction factor if they know that certain types of clay, for instance, are between them and the aquifer.

I now come to what I consider has done more harm than anything else to the acceptance of the practice of dowsing, and that is the person who sees a dowser working, or is tested by a dowser, and finding him or her self sensitive, without more ado is prepared to site wells anywhere for anybody. I find I am increasingly anxious to avoid testing people for their sensitivity unless I think that they might become serious students. To quote an extreme case,, a quite senior officer asked to be shown "how it worked," became an instant victim of auto-suggestion and, to my horror, within a week lectured the officers of his unit on dowsing, complete with demonstration.

On another occasion I was asked to test an Indian sergeant before he was put on the official accepted list of dowsers. I found his total experience was that some officer had shown him

how to hold a twig and he had, he said, sited a successful well in his village. I took him to a golf course on a drained swamp where within a few yards of one of the many springs, he assured me that there was one point only—not a line—where water could be found and that it was 150ft. down. I then took him to a polo ground a mile or so away and put him within a few yards of a capped tube well with a depth to water of nearly 200ft. Here he assured me that adequate water was everywhere and not more than 10ft. down—and this in 160ft. of clay! I could do little to change his practices and I am afraid he is one of those who will inevitably do the practice of dowsing much harm.

We have only to consider the odds against the inexpert but sensitive person to realise how sensitiveness is a danger, increasing with the natural quantity of the sensitivity. Let us assume that a person who wishes to be tested turns out to be naturally most sensitive. Supposing he or she were placed on a plain, given a twig, and told to search. I think you will agree that the odds against the first "pull" on the rod being the centre of a subsoil flow, or even indicating water, are astronomical. It might be a fissure, a fault or a tunnel, a pipe or a cable, or any of the outer bands of the nine indications of a subsoil flow. In fact, unless the subject happened to be inside the middle band of a stream indication and moved towards the line of the flow, the first indication could not be the indication of water. It is my experience that the edges of the R bands are felt, by some beginners, to be stronger than the centre of the flow indication, and this is an added danger. I have read recently a book by a prominent member of this Society who appears only to get the edges of a flow and finds the centre by measurement from these two edge indications.

Now it is obviously impossible to prohibit the inexperienced sensitive, nor do I wish to discourage *any* serious beginner, so I will later on discuss the problem of his education and control, but first I wish to mention other attributes which in my opinion call down opprobium and even ridicule on dowsing.

There is, I am certain, a use for samples and colours, and, with a matter as personal as dowsing differences in method bordering on idiosyncracy are inevitable, but I do not think that the mumbo-jumbo which is sometimes used, apparently to impress the outsider, can help at all. If we accept that the explanation of dowsing for water is a physical one, then a blue bead hanging from the right ear and a piece of red wool tied round the left knee cannot be of much assistance. I fully realise that a dowser can mentally inhibit the reception of an indication just as he can auto-suggest its apparent presence, but I think he must often mislead himself by the use of such aids, besides leaving himself open to adverse scientific criticism.

The severest self-criticism is essential at all times, and I believe that the simpler a dowser's methods, the more likely he is to be correct and, possibly, the more likely are engineers and others to take a less prejudiced view of his efforts.

S. W. Tromp, whom I have already quoted, gives the following list of "local disturbances" which a dowser can observe, and I give it as a list of possible sources of error rather than as a possible achievement by search by a dowser :—

"Water wells, locally circulating groundwater, water soil pipes, &c.; bundles of electric wires; roots of big trees; subterranean caves; geological faults; ore deposits; local changes in mineral composition of rocks, their texture and structure; electric power lines; buried foundations; excavated archæological sites refilled with other soil, &c.; sudden changes in vegetation."

I have already described some of what I consider the main failings of dowsers, and I can now say that my next remarks are only addressed to the serious student. I have little use for the "sensitive" who cannot be bothered to go through the laborious process of finding out what he can and cannot do before he or she searches for water, and it is most unfair that such people should mislead their friends or clients and cause avoidable useless expenditure on dry wells. If all dowsers had to pay for the sinking of their failures, there would be very few dry dowser-sited wells, and not nearly so many enthusiastic but inexperienced sensitives.

It is perhaps unfortunate that the commonest and the strongest indications are from subsoil flows, but they are also the most complicated, and because of the variety of information required, the most difficult to resolve accurately.

I have already mentioned the differences in dowsing methods, and I do not think it matters a scrap what instrument is used. If a dowser is sufficiently sensitive to pick up the indications normally accepted as being recognisable by dowsing search, the method of mechanical registration of his reflex muscular movements is unimportant. What is important is that all dowsers should find the same indications at any one place and also agree on the interpretation of those indications. Unfortunately, it seldom happens that two experienced dowsers survey the same site, and I am afraid the inexperienced seldom bother to check in detail the areas round successful wells, though this is by far the most valuable experience that can be found and infinitely more use than examining areas where there certainly may be flows, but where these are never likely to be developed by anyone and so can never be available to check results. In fact, we have now come to what I would consider is the basis of training for all aspiring dowsers. If anyone really means to take the study

seriously, I believe the best method is to find some other dowser, preferably with similar methods and equal enthusiasm, and, having studied the methods of other more experienced dowsers, to visit all the available successful wells, dowser-sited or not, and each work out an independent answer before the true finding is known and studied.

To give an example. Why does the well belonging to the Worthing Water Works at Clapham produce 680,000 gallons an hour while a well not far away at Findon, in similar strata and almost as deep, is almost useless and has been abandoned ? Similarly, when any two adjacent similar wells vary in output, the search for the difference cannot be anything but instructive. There are a few cases in England where streams emerge from cliffs or banks where the dip, if any, of the strata can be measured or estimated. Such flows can give excellent practice in the finding of depths. So also can the adits in wells dug in chalk formations.

When a beginner is absolutely certain that he can find the centre, over-the-flow, indication of his stream, and can identify the R bands and the depth bands, and knows intimately the indications of all the "local disturbances," faults, pipes, &c., and can really give a good shot at depth and quantity, then is the time for him to go and site his first well, preferably on his own land so that he shall be the first to benefit from all his labour !

The testing of a dowser has always presented such difficulties that it has never been achieved on anything like a general scale. I think the ideal would be to have a site containing a few of the more usual objects of search, a subsoil flow, a tunnel, a steel or iron pipe, a buried foundation, and for each dowser to be allowed to do his own survey in his own time. Crowds are, I am certain, inimical to good results, and many professional dowsers have their own special methods which they are unwilling to divulge to all and sundry.

No serious dowser could, I think, object to such a test, but the finding and checking of suitable test areas does produce a difficult problem. All successful candidates would, of course, have to be sworn to complete secrecy, but they could scarcely object to this in their own interests.

This might lead to further tests under the observation of non-dowsing sceptical scientists, but *both* sides should agree to the rules and stick to them. Early in the late war I had a try at locating unexploded bombs, and while I was entirely successful out in the open country where it did not really matter if they were found or not, I failed utterly to find a single one accurately in the mess of girders, pipes and cables of wrecked house where, of

course, it often mattered a lot. This led, though, to a proposal that I should be tested by a well-known scientific institution. They had no bombs in their garden then and I agreed to a test over any other similar metallic conductor. The test was a failure and I was not surprised, only rather annoyed, when I was later told that I had been asked to find a three-quarter-inch gas pipe which had been laid 40 years previously in wet soil. The site was on ballast beds full of minor water movements, which I always find give stronger indications than single conductors such as pipes. Painful experience with lost barrack plans has taught me that water pipes are one of the simplest things to identify accurately, but this corroded pipe was too difficult for me. I may say that I am still prepared to undergo any trial under test conditions to search for such things as I consider should be within the powers of a competent dowser to find.

Before I leave the problem of the status of dowsing, I must mention one more way in which I think great harm is done. That is in the Press and by the B.B.C. I do realise that news and broadcast items must be made as spectacular as possible, but I think it is a great pity that inexperienced dowsers should lend their services to such stunts. If those who wish to publicise themselves and their gifts in this partiular way would be prepared to demonstrate beforehand that their tricks could be done under strict test conditions, my criticism would be largely cancelled, but I believe that the number of these articles or demonstrations would also be considerably reduced. I, of course, am referring to the unscientific and often meaningless " demonstrations " and articles, and I am not referring to correspondence or articles connected with the serious investigation of dowsing.

Now I seem to have done a good deal of criticising in considering the answer to my question in the title of this talk, but a short answer to the question of where we stand would, I think, be " much nearer to a solution of the problem of what makes dowsing possible, and much nearer also the use of this field of force, radiation or whatever it is, in the accurate investigation of the earth's surface," and that is all to the good. I am inclined to agree with Tromp when he writes that there can be no simple explanation of the dowsing phenomena or their reception by the human receiver, but the more we know the more chance we have of eliminating errors.

Colonel Bell asked me if I would, in this talk, give a description of my own methods, but I do not think they differ greatly from those of many other dowsers and I have nothing new or startling to demonstrate. I always endeavour to read up the geology of the area—and the Library of the Geological Museum in South Kensington is invaluable for this—and look up the rainfall maps.

The catchment area can be measured off any contour map. I do not think that this information is in any way likely to establish erroneous preconceived ideas of what may be found and therefore it can be done first. On visiting the site, a traverse of two, or preferably three, boundaries will cut across all possible flows in and out of the area. After following the flows and making the necessary measurements at likely places I like then, and only then, to examine the data from any local wells. This I am sure is the best way to make a check on one's own depth measurements.

I use a light whalebone twig since it keeps its flexibility in all climates, and I prefer to map all three bands of any flow even though it is possible to identify the centre by its flow field. I use the Creyke method for depthing and the band width measurement for quantity, but after many surveys I have not yet established a curve of the relationship between quantity and band width. I would never use any measurement which depended on strength of pull or time delay before indication, as I believe there are too many variables in any such device, such as fatigue, weather, time of day, &c., apart from the difficulty of remembering how strong an indication even a few minutes earlier really was.

I find on referring to the report in the *Journal* of the last time I talked to the Society in 1936 that my indications and methods have changed little. I have added some data on depth finding and quantity estimating, and I have found that a large saving in time can be made if one can do the initial traverse of large areas in a car. The indications are quite definite at 20 m.p.h. for all flows worth stopping for, but the outer bands do not seem to have time to register and the indication appears to be close to the centre of the flow—what I cannot attempt to explain.

I am satisfied that with normal care and deliberate search it is possible to eliminate most of the avoidable errors, but I am sorry that neither Franklin nor Tromp hold out much hope of a portable instrument which will give some indications, quite independent of a dowser, over "local disturbances." I don't want such a device for my own personal use but to hand to the critic or sceptic after I have pegged the flow, so that he can at least agree that there is something happening there which might mean water, &c., down below.

Finally, I consider that this sensitiveness, extra sensory perception, or whatever you like to call it, is a valuable and important gift and that it is the right of anyone possessing it to develop and use it, but like all rights it carries a responsibility which involves careful study and much hard work before the possessor can employ it to the best advantage.

FRESH WATER SUPPLY IN CORAL ISLANDS

BY COMMANDER A. G. D. BAGOT, R.N.

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It is divided into two parts. The first half telling why these Coral Islands were occupied by the Forces, their geographical position and geological condition. The second half describing the Author's efforts to locate a supply of fresh water for the Forces stationed on the Atoll.

PART ONE

During the war of 1939-45, the Admiralty decided to provide a base in the middle of the Indian Ocean, from where anti-submarine air patrols could be carried out over a much wider area of sea than would be possible for aircraft based on India, Ceylon, or Africa.

The southernmost atoll of the Maldive group was chosen for this project. Situated just south of the Equator, some 600 miles from Ceylon, it is known as Addu Atoll. This atoll, or coral reef, upon which the islands are formed, is oval in shape, forming a lagoon six miles in diameter.

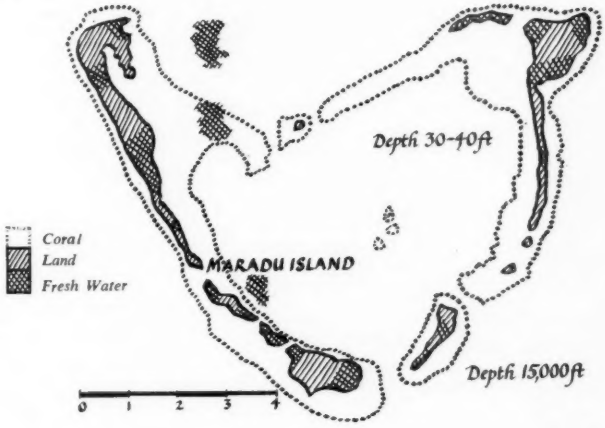

Fig. 1

A runway was construted on one of the largest of these islands, and this Base then provided all the facilities required for amphibious aircraft to alight and take off throughout the worst of the monsoons. The strategic importance of this base is obvious and need not be enlarged upon here.

From the foregoing it will be realised that for the construction and maintenance of such a base, a large number of naval, military and air force personnel were required; and a comparatively large force was stationed at this solitary outpost of the Empire.

Being in the tropics it will be appreciated also that an ample supply of fresh water for drinking, washing and cooking was just as important as the supply of food.

These islands themselves are not self-supporting.

A description is contained in the "West Coast of India Pilot 1937," from which the following is an extract:—

> "Addu Atoll is the southernmost of the Maldive group, is the smallest of the southern atoll and is fertile. It consists of nine islands and several islets; the western islands and islets are, on the whole, much more deeply wooded than the eastern ones and, instead of being covered with scrub, have several large trees on them. The two principal islands are Hitadu and Midu, situated at the north-western and north-eastern ends of the atoll respectively.
>
> It was reported in 1934 that the north-western and north-eastern ends of this atoll have extended further seawards."

The six principal islands surrounding the lagoon are inhabited by natives whose primary produce is dried fish, commonly known as Bombay Duck! The dried fish is exchanged with rice imported from India and Ceylon. Coconuts grow prolifically and provide not only food, but their leaves are used extensively for roofing houses and fencing gardens.

Malaria and scrub-typhus take a heavy toll of the population, the average life being 35 to 40 years. This is balanced by a fairly high birth-rate!

From the sketch it will be seen that the land area is small compared to the extent of coral, which dries above sea level at low tide; the maximum rise and fall being 4 feet. Inside the lagoon the depth of water is 30 to 40 feet, but immediately outside the coral reef the depth drops precipitously to 15,000 feet.

When one views this Maldive group of islands in perspective with the whole of the Indian Ocean, one sees a mountain range rising perpendicularly 15,000 feet from a comparatively flat sea bed, whose limits extend to the coasts of Africa and Sumatra, where respectively Mount Kenya rises to 20,000 and Mount Tailang to 10,000 feet above sea level.

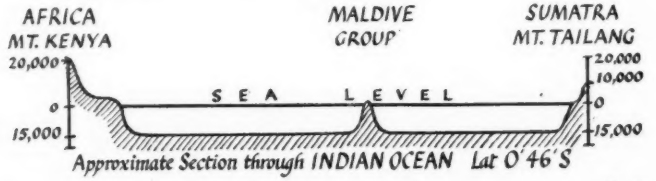

Fig. 2

The Maldive group of islands appear to be growing on a sub-terranean mountain range running north and south for a distance of 400 miles, and by their shape (most of the groups are circular) might even be formed upon the lips of extinct volcanoes.

It is known that coral formations do not grow below a depth of 300 feet (because at that depth the temperature is too cold for the micro-organisms to live); therefore it is fairly safe to assume that these islands have been forming themselves upon the peaks of this mountain range over a period of some thousands or millions of years.

As the coral grows above the tidal surface of the ocean, so it becomes a shelf or resting place for particles of fine earth and seeds, always present in the air. Helped by birds and other natural agencies, the formation of land is started. In time, this earth, from the foliage it grows and through the decaying vegetable matter, is forever improving itself.

In the centre of these islands, which are less than one mile wide, the earth rises from two to seven feet above sea level, and this soil, which is so rich in humus, is most prolific.

Taking into consideration the comparatively shallow depth of soil, these islands are remarkably feritle. They have become covered with scrub-jungle growth where coconuts, plantains, pomegranates, papaws, orange trees grow, and even bread-fruit trees as large as any grown in the jungles of Ceylon.

Throughout the islands the sub-soil is formed of coral sand with strata of coral stone; and to a depth of 32 feet varying densities of chalky soil may be found. In some places it becomes of a powdery nature with less grit and sand, more like French chalk, beneath which clay was discovered.

To determine the depth at which the mountain range exists below the surface is a matter for further survey!

Each island has its own village with school, church and mosque, and cemetery. The houses are built of coral stone.

Wells, three feet in diameter and lined with slab coral, are to be found in nearly every compound; but as a rule the water is used for washing purposes only, because it becomes stagnant and breeds mosquitoes. Other wells, often situated outside the villages, are kept for drinking purposes only; and small fish may be found in these for keeping down mosquitoes! The depth of water varies between two to eight feet below ground level.

It is interesting to note that in some of the wells the fresh water rises and falls with the tide, yet the water remains fresh, not even brackish. An explanation for this is made later on.

Other wells are to be found near the mosques. These are about 12 feet in diameter, paved with coral stone, and are used only for the washing of feet prior to entering the mosque. The

water is quite stagnant with green slime on the top. A grand place for the breeding of mosquitoes and no wonder that the average span of life on these islands is so short!

From the foregoing preliminary survey of these islands one might have expected to find water anywhere, but such was not the case. In fact, the island of Maradu was known as the "one-well-island," having only one well from which drinking water was obtained, situated some distance from the village. All enquiries from the natives led one to believe that good drinking water was scarce throughout the Atoll.

A tanker, therefore, had to make the voyage regularly to and from Ceylon, to supply sufficient amount of water required by the several thousand members of the Forces stationed at the Base; and there was always the chance that this ship might be torpedoed en route, but fortunately this never happened. Nevertheless, the use of any tanker for this purpose meant one less for the conveyance of oil fuel so urgently needed in all theatres of the war.

The advantages to be gained if an adequate supply of fresh water could be found on this atoll became obvious, and it was for this reason that the writer of this article set out to solve the problem.

Part Two

By good chance it so happened that I was appointed to act for the Naval-Officer-in-Charge of this Base while he was away on leave. The Admiral, the Flag Officer Ceylon, who was responsible for the administration of Addu Atoll, knowing that I dabbled in the mysteries of divining, remarked that it would provide me with an opportunity to put my theory to practice!

I flew from Ceylon to the Base. This gave me just the opportunity I desired, which was, first of all, to see whether any subterranean stream fed this submerged mountain range, because, if so, then it might be possible to tap such a stream.

Having previously detected underground rivers and streams while flying over Egypt, it was no impromptu stunt to detect water under the ocean bed, for this I had also done when making voyages in ships.

I use a light wire, about two feet long bent into the shape of a blunt arrow head, for detecting subterranean water.

Approaching this range of Atolls, which extend some 400 miles in length, we arrived over a position about 100 miles from the southernmost end, before setting course direct to Addu. There I detected three very powerful streams running diagonally NW/SE across Suvadiva Atoll, which was 60 miles immediately north of Addu. I felt the streams at intervals of approximately 10 miles as we passed over them at right angles. The influence

of the streams could be felt a long way off. We were flying at 1,800 feet, speed 120 m.p.h., and the height of the plane plus the depth of the ocean had to be taken into consideration when determining the probable depth of the streams or rivers under the sea bed.

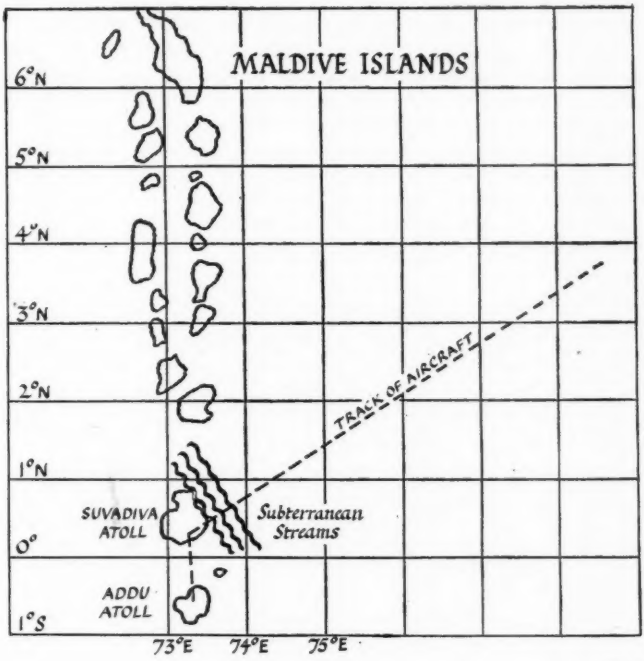

Fig. 3

It is known that fresh water comes bubbling up from the sea bed in certain places, hence it may be supposed that these are fed from submerged rivers perhaps coming from hundreds of miles away at higher levels.

I was hoping to find another stream as we approached Addu, but unfortunately this was not the case. On arrival over the Base we immediately alighted on the lagoon, which allowed no further opportunity just then for survey.

It has already been mentioned that most of the islands are thickly overgrown with jungle-scrub. This foliage is the host of the scrub-typhus bug, so the scrub area was out of bounds to troops !

Because of this, as well as for convenience, I arranged to fly over and around the atoll for a preliminary survey, using the Naval Walrus type flying craft, which was very suitable for the purpose.

Flying at 500 feet I was able to pin-point my position all the time, and by my side was an assistant who marked on a chart the position where I detected water as we passed over it.

Two of these positions happened to be over part of the lagoon, not over the land area. The water I detected appeared to be static and there was no indication of any stream running through the area as was the case with the atoll further north.

Having located from the air the positions in each island where water appeared to be, I then went ashore, supported by a squad of Royal Marines from the N.M.D.B.O. Regiment equipped with a Norton tube boring set and wearing protective clothing for scrub-typhus.

The Norton tube is made up of lengths of tubing which are rammed into the soil by a weight suspended on sheer legs. When the tubes have been sunk to the required level, a pump (village pump type) is fitted on and primed with water to create suction. The pump then draws up any water that may be present.

Over the areas which had been marked for water I sunk the tubes. In one place the tube bent as it came up against coral stone too tough to penetrate; and we had no drill.

Near a swamp the water drawn up was discoloured yellow and smelt strong of sulphuretted hydrogen as to be quite unsuitable, even for washing purposes. With aeration, however, the H_2S smell disappeared, but the water still remained yellow. In these swamps the soil was very rich in rotting vegetable matter, hence the H_2S. Nearby, however, I came across a supply which was saline to taste but free from H_2S. Less often did I come across a supply which was neither brackish nor tainted H_2S.

I soon learnt and had to admit that my mystical powers did not differentiate between the various kinds of water, and I had not the alternative of being able to tap a running stream!

I carried out other tests on Maradu Island, the "one-well-island," and sunk the tube within 100 yards of the one and only well they had for drinking water.

Between four to ten feet perfectly pure drinking water was obtained. Between 10 and 20 feet the water was smelling of H_2S. Between 20 and 30 feet the water withdrawn was saline. Thirty-two feet was the maximum depth to which this tube could be worked. The analytical report upon the water from this shaft is given in the appendix, from which it will be seen that the water at a level of four to ten feet was as good as any to be found in England for supply to towns.

Encouraged by these results I decided to sink a tube at the other end of this island, where, according to my preliminary survey, water should also be found. And, at a depth of nine feet equally good water was found, to the surprise of all the natives who, up till then, had relied upon only one well! In fact, the water at this end of their island, they said, was better than the original supply! I kept a sample of this water in a bottle and it remained perfectly fresh for more than twelve months.

From this well water was brought up the Norton tube at a rate of 400 gallons an hour for a period of three hours.

On most of the other islands good drinking water was found between six to ten feet deep, and at this rate of supply it was estimated that there would be sufficient water for everyone stationed at the Base, at at least enough for as many as could conveniently be billeted upon a given area.

A month later the Admiral visited the Base, and it was with some degree of satisfaction I was able to answer in the affirmative his question "Have you found the Water?"

Upon conducting him to the fountain head of the Norton tube, he personally tested the drinking water for its quality and, being satisfied, gave orders to the Fortress Commander that in future the Garrison Engineer must sink wells and build reservoirs to supply the required amount of fresh water for the Forces on the Atoll.

Further orders followed to divert the tanker for services elsewhere, and this must have resulted in a considerable financial saving on Admiralty account in respect of Addu Atoll!

In weighing up this subject in all its aspects, it appears that in the formation of these atolls, besides the coral and earth produced by nature, there is a bed of clay which provides a catchment area for rain water which falls upon the site.

The rise and fall of fresh water might be accounted for by reason of salt water percolating through the coral formation at lower levels than the clay, and thereby causing the fresh water, floating upon the salt water, to rise and fall with the tide.

Further tests at deeper levels would provide more information upon which to base some firm conclusions. With drills of sufficient length one might be able to determine the depth of the coral and, perhaps, tap a subterranean stream in the submerged range of mountains.

In conclusion, it can be stated that these particular atolls are still growing and extending in size, while building up rich soil and their own water supply.

APPENDIX

MARADU ISLAND (Southern end)

Depth Feet	*Soil*	*Water*	*Chlorine*	*Electric Conductivity*	*Permanent Hardness*	*Remarks*
4	soft	yes	—	—	—	pH value was 7.6
7.5	hard	sample	4.4	550	1	to 7.9
10	soft	—	—	—	—	
12	hard	—	—	—	—	
15	soft	sample	177	2,756	58	
17.5	hard	—	—	—	—	At deeper
20	medium	sample	257	8,000	88	levels white
23	hard	—	—	—	—	clayey soil
25	medium	sample	480	14,000	154	deposits
30	very soft	sample	813	26,000	262	
32	very hard	sample	1,020	32,000	318	

NOTES.—Tests made with "Norton Tube Wells."

		Parts
Standard purity of drinking water	Chlorine	50
	Electrical Conductivity ..	2,000
	Permanent hardness ..	20

The comparative amount of Chlorine and Electrical Conductivity indicates the amount of salinity in the water.

Permanent hardness: that which is not removed by boiling.

Sulphuretted hydrogen odour was present in small quantity, except in the first sample, but this disappeared with aeration.

Analytical Report by Ceylon Government Analyst, 1943.

PSYCHICAL PHYSICS*

A CRITICAL APPRECIATION

BY J. CECIL MABY, B.Sc., A.R.C.S., F.R.A.S., B.S.D.

It is impossible, in the space of a formal review, to do justice to a work of this calibre with its extraordinary breadth of scientific analysis and almost excessive factual detail—in which features lie both the strength and weakness of Dr. Tromp's ambitious and monumental work. Certainly this is an outstanding contribution to the subject of Dowsing and Radiesthesia : a book to be reckoned with both by orthodox scientists of intellectual courage and vision and by all who have already pledged themselves to the specialised study of a particularly complex and difficult subject. And the latter fact will be fully apparent to anyone who succeeds in digesting the present book, though it may be suspected by the less erudite that Dr. Tromp had overloaded his artillery in order to scare off the dilletante as well as to impress the pedant.

In the first respect the author will indubitably succeed, for his approach is strictly technical and realistic, and he will have no truck with pseudo-science, popular sensationalism, facile answers or half measures. But whether orthodox scientists at large can be induced even by Dr. Tromp (who ought to succeed if anyone can) to bestir themselves and, at long last, to begin to examine these subtle and somewhat *outré* phenomena remains to be seen. Personally, I doubt it, while sharing the author's conviction that Radiesthesia, Dowsing and Parapsychology are much maligned and, on the whole, sadly neglected studies.

Accordingly, the author has brought together from the exceptionally wide fund of his reading of modern science, a massive array of whatever facts and theories relative to biophysical, geophysical, physico-chemical and radiological phenomena he suspects may possess some bearing, however remote, on Radiesthesia and the physical aspects of Parapsychology. Hence the title of the book—a title that vitalists and metaphysicians are bound to deplore, though the author himself is convinced that the distinction between physical and psychical phenomena " is not based on facts," and that " psychic phenomena can be approached by using physical and physico-chemical methods." This claim, however, appears to be highly questionable in the light of much contrary evidence that the most resolute monists and mechanists have, so far, entirely failed to refute.

The book is divided into only three chapters of inordinate length, which are then elaborately subdivided into numerous parts, followed by sub-titles and sub-sub-titles in profusion : a form of presentation that the reader may find unduly involved

* *A Scientific Analysis of Dowsing, Radiesthesia and Kindred Divining Phenomena*, by Prof. S. W. Tromp. (Elsevier Publishing Co. Inc., London, 1949 ; pp. 534, with 149 text figs. ; price £3).

and bewildering, though the whole is most orderly, the style lucid and all factual descriptions and discussions equally clear, logical and concise. But such a lay-out often makes it difficult to disentangle any coherent train of reasoning amid the mass of un-coordinated facts and theories presented in successive sections.

A fair analysis of the present status, needs and shortcomings of Divining as a scientific subject is given in the Introduction, and it is explained that the main aim of the book is to survey the field in a general way so as to attract fresh scientific investigators, rather than to attempt any final or complete account. Also the urgent need for scientific team-work is stressed, owing to the complexity of the subject and the call for specialised knowledge in a number of different fields—a condition that several members of the B.S.D. tried to fulfil up to the present economic crisis, incidentally.

Chapters 1 and 2, covering no less than 286 closely printed pages, are entitled *Electro-magnetic fields in and around living organisms* and *Further evidence of the influence of external e.m. fields on living organisms* respectively, and they are merely introductory to chapter 3, *Divining and kindred phenomena*, in which the book's title is finally vindicated. To obtain some idea of the immense number of discrete biophysical and geophysical subjects covered by the first two chapters, the prospective reader must consult the actual table of contents. All this material, though admirably summarised and comprising an invaluable work of general reference for biophysicists and others interested in the subject from an academic angle, often appears to be of questionable relevance to Radiesthesia or practical divination. Indeed, little first-hand appreciation of the specialised techniques of dowsing and radiesthesia, as practised in the field, laboratory or clinic, is evinced throughout the book ; though this fact does not in any way detract from its outstanding merits in other respects.

One may, perhaps, sum up this impression by saying that Dr. Tromp has, despite his obvious sympathy, knowledge and interest in the mysteries of the " untouchable " subjects of Dowsing, Radiesthesia and Divination (with its parapsychological savour), really approached the problem from outside the pale, rather as an inquisitive scientific bystander than as a convinced and adherent practitioner himself. Such a position, though beneficial in so far as objective scientific analysis and the recruiting of other orthodox workers is concerned, necessarily imposes severe limitations from the side of the radiesthetic specialist and the practical dowser. But his contribution to the subject is none the less valuable for that reason, and his sincerity and impartiality are, in the main, highly commendable. All serious workers in this field should, therefore, be most grateful to the author of so fine a scientific anthology, to which are added several new sets of data in confirmation of the objective nature of radiesthesia.

These new data result from the author's own laboratory tests with artificial magnetic fields, various experiments in pendulism, or *pallomancy*, and the application of a string galvanometer to detection of electro-cardiograms with varying skin resistance. Numerous galvanometer records illustrate this work, and it is pleasing to see that results fall into line with earlier work, such as that on magnetic effects outlined in ***The Physics of the Divining Rod*** (1939), which Dr. Tromp quotes (along with work by De Vita, Jemma, Wüst, Wimmer and others) with cautious approval.

In explanation of his prolonged introductory chapters, the author writes : " The discussions form the basis of a steep pyramid, of which the apex is composed of the divining phenomena. Without this basis any attempt to climb the pyramid is doomed to failure, and it is this knowledge, we hope, that will satisfy the impatient reader who might have wondered whether this is a book on physical chemistry and physiology or on divining."

Turning for a moment to the concluding sections of the book, included in the third chapter. It is probable that many people will fail to see any obvious connection between hypnotic phenomena (an excellent summary is given) and certain other parapsychological ones (which are briefly alluded to) and the earlier sections ; though it is conceivable that radiesthetic and bio-electric research will ultimately throw some light on limited aspects of extra-sensory perception. But the so-called parapsychological phenomena need far fuller analysis to justify their inclusion in a book of the present kind. Nor does there seem to be any real excuse for including the curious cloud-chamber tests on expiring mice and grasshoppers by Dr. Watters and others (not cited), the description of which tests does not do justice to the original experiments.

The author also entirely fails, apparently, to apprehend, let alone discuss, the vast mass of genuinely parapsychological and spiritistic evidence accumulated by generations of critical and well-informed investigators ; evidence which still obstinately refuses to fit into any normal physical or mechanistic scheme. All such facts and theories are conveniently disregarded, *ex hypothesi*, though they are not, of course, thereby disposed of any more than they were by Haeckel and other Victorian critics.

On the other hand, there are useful references to the problem of homing and migratory, directional instincts in birds ; especially an abstract (Appendix II) of a recent important paper by Prof. H. L. Yeagley, U.S.A., which is the most significant contribution to date in this connection. And brief reference is also made to previous work in Radiesthesia on ionising rays and electromagnetic wave fields, etc. ; though the discussion of this important aspect of the subject is relatively superficial, and hardly does justice to the great amount of careful field and instrumental work devoted to it by others in recent years.

Indeed, Dr. Tromp does not favour a radio type (? Hertzian) explanation of the main phenomena of dowsing, and he also treats the repeatedly verified claims of leading operators to be able to estimate depth, etc., in a rather cavalier manner, without substantiating his objections—which is neither just nor scientific. He also skates very lightly over the methods and achievements in general of professional dowsers and radiesthetists, though he does not deny them the right to their craft, subject to closer scientific scrutiny and analysis of results.

In any case, interested and, for the most part, favourable attention to dowsing by a professional geologist is encouraging, even though the old and baseless objection to the idea of underground veins of water is resuscitated, despite the fact that such veins (not even always in rock fissures) can be observed wherever one goes by any unprejudiced person. Surely geologists, of all people, must have noticed the sharply defined outflows of water, called surface springs, created by such underground veins where they emerge from cliffs, cuttings, in mining shafts and tunnels, and on steep hillsides! Sometimes they are quite wide and sluggish, at others narrow, rapid and almost pipe-like, and normally running very straight for great distances underground, throughout which course they can readily be traced by a skilled dowser or even by certain instrumental methods (see analyses of associated electro-magnetic fields of manifestation by previous authors); and wells, bores or cuttings at any point along such lines will encounter and demonstrate the veins in approximately their calculated positions and, all being well, at the right depth. Nearby bores or wells, not exactly on such lines, will—where no generalised water-bearing stratum exists, as not infrequently happens—fail to strike water at the equivalent depth. So that this foolish bogey of the geologists is purely imaginary and shows to what extremes of negation scientific or popular prejudice may lead.

More welcome, though surely over-amplified, are the author's lists of interfering and variable geophyscal, bio-electric and other factors that are liable to upset both instrumental and dowsing investigations, indoors and out; though it is not, perhaps, realised that the human sensitive is a lot more adaptable and (if well trained and fully experienced) self-controllable and selective in response than any single mechanical instrument. This is where training, experience, some electrical and geological knowledge and, up to a point, the use of "samples," etc., come in. An expert dowser begins where instruments usually leave off, though an inexperienced, emotional or imaginative amateur may be worse than an ill-regulated physical instrument.

Variable and confusing factors are undoubtedly a reality, as the present writer has repeatedly emphasised, though insufficiently accounted for by the average dowser; but were things anywhere

near as bad as Dr. Tromp infers, no dowser, however skilled, would ever have achieved worthwhile success in commercial work—as many have done. Moreover, useful water surveys that cost a few guineas and a day's hard work for client and dowser would run into weeks of time and fabulous fees, were it essential to proceed in the excessively cautious and over-elaborate manner which he recommends. That is why practising dowsers and some other investigators have striven hard to evolve relatively simple, though critical codes of conduct by means of which tolerably dependable results can be obtained in any given project —with or without instruments.

Again, unless the question of specific frequencies of some wave radiation, dependent on chemical composition and molecular and atomic structure, is taken into account, in addition to the grosser features of the e.m. fields associated with streams, cables, pipes, ore bodies, etc., the larger half of modern radiesthesia and radionic diagnosis, etc., is left out of the picture. Certainly pendular work (pallomancy) in its finer aspects, with the vital questions of " samples " (or " witnesses "), " serial numbers," specific *rémanence* effects (attributed by the author far too vaguely and unconvincingly to a " shadow " or " post-condenser " effect, electrically speaking), and the " fundamental rays," etc., all fall to the ground.

Any investigator, therefore, who avoids the basic electro-magnetic aspect of radiesthesia, and is restricted to an un-co-ordinated assortment of possible stimuli (visual, olfactory, auditory tactile, electrostatic and psychological), will lack any unifying hypothesis by which to interpret the more fundamental reactions of radiesthesia proper ; even though it is almost certain that *soi-disant* dowsing reactions (neuro-muscular reflexes) can and do result from a variety of other sensory and bio-electric stimuli in addition to the basic electro-magnetic ones. And this is especially likely to happen with hypersensitive and suggestible subjects who have not learnt proper control of dowsing indicators.

In other words, taking the prefix *radio* out of radiesthesia is like subtracting *psychic* from psychical research or *spirit* from spiritism : instead of the mass of phenomena falling into a fairly coherent and logical scheme, all disintegrates into seemingly irrelevant, dissociated events, and the voyager is left without rudder, sheet anchor or compass, tossing and drifting at random.

Of course, Dr. Tromp does not deny electro-magnetic influences, which he lists in his historical survey and discusses from many angles, but he fails to recognise the basic radio (? Hertzian) principles underlying and inter-connecting most of the fundamental dowsing phenomena—which he says others have over-stressed. And the incubus of the multifarious bio-electric effects cited in his first two chapters possibly blinds him to certain wider issues.

The work of De Vita, Jemma, Wüst and Wimmer, Franklin

and Maby is, however, briefly reviewed with considerable approval, in addition to the account of the author's own interesting tests. And a very imposing list of possible factors in dowsing is given, that includes atmospheric, geophysical, bio-electric, acoustic, olfactory and, in general, electro-magnetic ones.

This is amplified by a list of the many precautions to be taken during dowsing tests; some just, others probably needless. And it is concluded that only the *electro-magnetic*, *acoustic* and *volatile* stimuli (of whatever origin) are likely to be really effective. Yet no grand synthesis or final deductions, such as one might have expected, appear at the end. The reader is thus left rather more bewildered and "up in the air" than before, albeit greatly instructed and stimulated.

In the course of a prolonged review of the work of Gurwitsch, Stempell and others on the so-called mitogenetic rays from living tissues, that is most informative and impartial, the author rightly stresses the unusually subtle and variable nature of such phenomena (as in Radiesthesia and Parapsychology), that may make precise repetition at other times and places difficult or even impossible. So that many well intended scientific objections and denials may be invalid and statistical treatment virtually worthless—a point made at various times by the present writer.

But it is, surely, a pity that so much space is devoted to detailed discussions of problems such as the mitogenetic rays, the Russell effect, the human brain, etc., etc., which are of very dubious relevance to the major problems of radiesthesia, and so little to practical dowsing, radiesthetic diagnosis, radionic principles and so forth.

A number of interesting experiments were made by the author with a pendulum as indicator, which he concluded was more sensitive than the divining rod. Indeed, he appears to be less critical of the use of "pallomancy" in medical work than of the forked rod in field dowsing—possibly because the latter tends to infringe upon his own domain as a geologist. Yet the facts remain that the pendulum seems to be more liable to auto-suggestive control of psychological origin, that it is far less sensitive than a properly chosen and manipulated rod in many dowsers' hands, and that field dowsers mainly adhere to the aboriginal forked rod of wood or some modern substitute. However, pallomancy (a nasty word!) is commonly preferred for delicate diagnostic or analytical tests, polar distinctions, etc., when working indoors.

Medical radiesthesia and the work of Abrams and Boyd are briefly mentioned with reticent approval, also *homoeopathy*. *Bi-polarity*, as indicated both by dowsing and some delicate electro-magnetic tests, is admitted, also various other claims by previous investigators are substantiated, as follows:—Dependence of sensitivity on *muscle tension*; that *speed of motion* of a dowser

through a given field increases reaction, though slow motion is needed for fine definition of zones, etc.; that there is a *variable time lag* of several seconds length between a physical stimulus and reflex response: that *physiological depression and fatigue* effects are observable, and that human bystanders or other intrusive objects may cause *local disturbance of the* (? *electro-magnetic*) *field.*

But the author's remarks on the possible causes of pendular movements in radiesthesia, in terms of potential gradients, light intensities, volatile stimuli, and so forth appear to be far too vague and inconclusive as compared with hypotheses based on electro-magnetic wave fields and pulses, with plane and circular polarisation, standing wave-bands, orientation effects, etc. Specific responses to different materials could also scarcely be explained on the former basis.

Finally, one must mention the illuminating tests on dowsers made by Dr. Tromp with variable magnetic fields and by means of electro-cardiograms. To appreciate these the original text should be consulted. Suffice it to say that positive dowsing reactions were obtained when a sensitive subject walked across the lines of force of an artificial magnetic field, or when he altered his orientation to them, or when the field was switched on or off, etc. There was, in short, an inductive reaction in the nerves and muscles of the kind already shown by other workers, including the present writer. (See *Physics of the Divining Rod*).

Likewise, responses were obtained and graphed when a dowser traversed a zone where there was local magnetic disturbance of the Earth's general field. And it may be added here that news has lately come from Holland of other similar data in relation to dowsing " reaction zones," obtained by physicists of authority using the most refined magnetometers, despite initial scepticism of radiesthetic claims in this respect.

In the second place, by applying hand-cuff electrodes to the subject and connected to an Einthoven string galvanometer so as to record electro-cardiograms. Changes of skin resistance, thought not to be due to the well-known psycho-galvanic reflex (emotional response to shock, etc.), were recorded when the subject crossed a dowsing zone; and different effects resulted when walking perpendicularly or parallel to the latter.

It also appeared that high skin resistance was adverse to dowsing ability, and that sensitivity could be increased by moistening the skin. Using 3 mm. diam. electrodes, sensitives showed skin resistances of 10,000 to 50,000 ohms, according to the state of the skin. Insensitives might run as high as 50,000 to 500,000 ohms, or even up to three million ohms.

Such observations confirm what one observes in p.g. reflex work. But the fact remains that many good dowsers have dry skin of high resistance, as my own tests have shown, and one

cannot be sure that Dr. Tromp was dealing with part of the basic dowsing reflex, so that caution is needed in drawing conclusions. Again, in the magnetic tests it is possible that the orientation of the subject's controlling muscles and limbs relative to the lines of force of the field or (?) the plane of polarisation of concomitant radiations—which other investigators find is often all-important—was not sufficiently considered.

In conclusion, it should be said that the general style and format of the book is of very high quality, typographical errors few, and factual errors also, apparently, few ; but the ground covered is so extensive that a team of experts would be needed to pass final judgment.

Good subjects and authors indices are provided, and an outstanding feature is a remarkably extensive bibliography, incorporating 1,496 entries, for which students will be especially grateful. But the entire work is, as was said at the outset, a truly monumental one—a labour equally of love and scholarship of no mean order—and such criticisms as have been raised (constructively, I hope) in this long review are greatly out-weighed by the admiration and gratitude one must feel for Prof. Tromp's splendid monograph.

ADDENDUM

I would like to take this opportunity to reply briefly to certain criticisms of *The Physics of the Divining Rod* (1939) made by Prof. S. W. Tromp in his new book, reviewed above. Though only too well aware of the shortcomings of our own book, which was, after all, a pioneering effort that had to avoid undue technicality yet also endeavour to interest professional scientists as well as diviners, I feel that Dr. Tromp's three main criticisms are scarcely justified. They are as follows :—

1. That a scientific analysis of all the physiological processes responsible for dowsing were not given, and physiological problems hardly touched upon.
2. That we devoted ourselves almost exclusively to a Hertzian explanation of the main dowsing phenomena, and so did not see the wood for the tress.
3. That he (Dr. Tromp) and other expert physicists, etc., do not find our geophysical and mathematical considerations to be always correct.

Replying to these points in order, it may be said that :—

1. A detailed physiological explanation was scarcely possible at that early date, nor is it even now, as Dr. Tromp's own far fuller physiological analysis and list of alternatives indicates ; neither did the scope of our book permit of prolonged citations of dubious relevance from works on general physiology and geophysics. On pp. 258-303 and 351-382, however, considerable space was devoted to a preliminary attempt to show roughly in what way the neuro-muscular reflexes might be caused by electromagnetic induction and/or ionising rays affecting the cell membrances, synaptic junctions, blood stream, etc. And Dr. Tromp has merely enlarged on all this and other features of our book, which will have served at least one useful purpose if it succeeds in stimulating others, such as Dr. Tromp, with wider or more specialised knowledge, to elaborate some of our earlier suggestions.

2. Although we endeavoured to formulate a single coherent electromagnetic hypothesis, based on many and prolonged physiological and instrumental tests, geophysical data and much work by previous investigators, so as to correlate the *fundamental* data of dowsing, etc. ; it is incorrect to say that " the whole book is devoted to assembling facts which prove this assumption." In fact, long sections were devoted to other issues, including the effect of

electrostatic fields, magnetic induction, ionising rays and particles, an historical summary, application of the new knowledge in the field, physiological and electro-medical considerations.

Moreover, the choice of a radio type hypothesis, as offering the "safest bet" in view of most of the facts that count in practical radiesthesia, was forced upon us by those facts, not selected prejudicially in advance. Nor has Dr. Tromp been able to evade this issue, within certain limits, in his own analysis of the phenomena. Indeed, a great deal of more detailed data that have been accumulated since 1939 by various workers tend, I believe, to substantiate our original outline picture, if one excludes certain side issues and minor residuals. Nor does Dr. Tromp's new work alter that view, though he has done well to stress multiple factors and elaborate the details.

As for "not seeing the wood for the trees," since our own monograph was a good deal simpler, more coherent, in interpretation and more specialised than Dr. Tromp's new book (a veritable encyclopaedia for biophysicists!) is it not possible that the boot is really on the other foot?

3. It was neither claimed nor expected that all the physical and mathematical considerations in our pioneering effort would necessarily prove correct in every respect or stand the test of time, though we tried to be as objective and accurate as possible in view of limited time, funds and other facilities: and quotations from other sources were believed to be reliable.

In any case, no one since then has obtained seriously contradictory results that I know of (in so far as anyone else has troubled to check our findings), and various generally confirmatory experiments have been recorded. Moreover, the burden of disproof is on those who object, but critics should produce specific objections, giving precise reasons and data, not simply disagree vaguely and "on principle." And Dr. Tromp himself fails to give either details or reasons for his misgivings, which is hardly fair or scientific.

Apart from this, Dr. Tromp has made several kind and appreciative references to our own work, for which I wish to thank him on behalf of Mr. Franklin and myself.

Biophysical Laboratory,
Bourton-on-the-Hill,
Moreton-in-Marsh, Glos.

J. CECIL MABY,
Jan. 30th, 1950.

A STRANGE DIVINATION

BY JOANNA ST. JOHNSTONE

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He was a middle-aged country policeman, and he stood holding his bicycle as he talked. My husband was Chief Constable of the county and he had stopped the car to speak to him. As we were about to drive on, the man suddenly made a curious remark: "If ever you think there is a body buried, sir, and you don't know where it is I should be glad if you would let me know." "Why? Do you like digging?" my husband asked. "No, sir, but I can divine flesh," the man replied. We discussed it afterwards and thought it an odd thing, for neither of us had ever heard before that it could be done. Time passed, and there were no bodies buried, or if there were, the police were not called upon to dig for them.

Some two years later my husband went out with a party of farmers and men from the village. Their object was the destruction of a badger whose raids on neighbouring poultry yards had caused considerable concern at a time when eggs and chickens

were scarce. After some hours of fruitless digging, a terrier had been put down the set in an effort to dislodge the animal, but instead of doing so, the dog itself remained below, presumably trapped. Then their digging became more an effort to rescue the terrier than to catch the badger, but it was heavy going in the clay of the spinney and, because of the multiplicity of passages in the set, they had no exact idea of where to dig.

"It's a pity we haven't got Constable Blank here," my husband at last remarked. "He once told me he could divine flesh." There were murmurs of disbelief, and then someone said, "Well, Bert here is a diviner, aren't you? Go on and have a try, or we shall be here all night." "I can divine water," he said doubtfully, "but I've never heard of anyone divining flesh." He was very unwilling to try, perhaps feeling that such an attempt would be an abuse of his gift, for, like most diviners, he was jealous of it and did not to like to make an exhibition of his peculiar power. But they were very pressing, and at last he was persuaded and went to cut a suitable stick from the hedge.

"I don't suppose it will work," he said, as he began to walk about over the ground beneath which they believed the set lay. Suddenly the stick twisted and doubled in his hands. Although most of them agreed with Bert that it was probably water, they marked the spot and began to dig furiously. A little later, when they had gone down about five feet, someone suggested that it would be interesting to see how the stick reacted now, since they were presumably closer to the animals. To their surprise, there was no reaction at all. Bert now felt that his powers were in question, and he began to walk again over the ground which he had previously covered. This time, movement came from the stick at a spot where before it had shown no response. "You see what's happened?" someone cried excitedly. "It was right the first time; they were there, probably in a dead end, but when the badger heard us digging, he fought the dog back and they've gone off down a different run."

They started to dig again, but it was late and dark by that time, and almost impossible to see to dig through the tangle of roots. Regretfully, they abandoned the attempt. The next morning some of them went back and continued to dig at the place where they had left off the night before. Eventually they found the badger and the terrier, both dead, exactly beneath the spot where the stick had reacted for the second time on the previous night.

This is, of course, a true story; if it were not, there would be no point in telling it. It happened on the outskirts of a village not twenty miles from *The Countryman* office. From that day to this, I have never heard anyone else claim to have a similar power. But what I have always wondered is how Constable Blank first came to discover that he possessed it.

PART TWO

WANDERINGS IN THE RADIESTHETIC FIELD

Address given to the British Society of Dowsers on December 14th, 1949

BY A. T. WESTLAKE, B.A., M.B., B.CHIR., M.R.C.S., L.R.C.P.

Introducing Dr. Westlake the Chairman said: Ladies and Gentlemen, Our lecturer to-day has a special connection with the subject of Dowsing, as his Father, the late Mr. Ernest Westlake, assisted Professor Barrett, as he then was, in the research work on dowsing and divining which he had undertaken on behalf of the Society for Psychical Research. But a more particular claim to our attention is the fact that Mr. Westlake, with much patient labour, compiled a very large and complete bibliography on those subjects, and it was, no doubt, this bibliography in a much abridged form which was printed at the end of *The Divining Rod*, the well-known book which embodies Sir William Barrett's researches.

Dr. Westlake has himself studied radiesthesia from the medical point of view for many years, and I will now ask him to describe to us his wanderings in the radiesthetic field.

Mr. Chairman, Ladies and Gentlemen,

When your President asked me to speak to this Society I was at first at a loss to know what to talk about as I am not a Dowser, have had little or no experience of water-divining, and cannot even work a pendulum.

But I can possibly claim to know something by proxy, for, as the Chairman has already told you, my Father made Water-Divining his chief activity in the Society for Psychical Research. His reason for selecting Dowsing, rather than any other aspect of Psychical Research, is interesting. In the social and religious circles in which he lived all psychic phenomena was looked upon as the work of the Devil and to be avoided at all costs. The only possible exception was Dowsing, which, while still suspect, was considered sufficiently respectable to be tolerated. His main contribution in this field is a Bibliography of the Divining Rod, which after many vicissitudes, I have at last had the pleasure of loaning to this Society. I can only hope that my Father's many years of work in the British Museum compiling it may be of assistance to all Dowsers, both students and practitioners.

But now to my wanderings. When I first began seriously to think about the question of a vocation I decided I should like to study Health; but like Dr. Wrench, the author of the now famous *The Wheel of Health*, I soon discovered that such a thing was impossible—indeed almost impious. To study Health, one had to study Disease, which seemed to me a contradiction in terms; nevertheless, there was no other way, and so for five years I studied Disease in its many aspects.

The necessity of earning a living as a Doctor then made the pursuit of my main objectives even more remote, and it was not until 20 years later that I had the chance to begin the study of health and wholeness. Then I discovered, as the authors of *The Peckham Experiment* observe, that "Health is totally distinct from sickness, when, subject to disorder, the individual obeys the laws of pathology ? In health man observes a different natural law—the law of function—for health means living a full functional existence in which development proceeds according to potentiality." I will return to this theme later on. At the moment let us return to the subject of disease.

One thing which struck me in the course of my medical studies was the contingent nature of much of its findings. It seemed to me that a great deal of medical diagnosis, more often than not, was a case of shutting the stable door after the horse was stolen ; in other words, that a diagnosis was usually possible only when destructive changes had already taken place in the tissues. The best one could then do, by treatment, was to alleviate symptoms or to remove the diseased part of the organism. Little appeared to be known of basic and primary causes, and it seemed impossible to diagnose departures from the normal in the very earliest stages. The average doctor was mainly engaged in baling a leaking boat.

I felt that there should be some more exact and subtle method of finding out precisely what was the matter and of applying early remedies. Hence,when about 1925 I first came across Abrams' work I felt at once that here was the sort of thing I had been looking for. I read such books on the subject as I could get and had serious thoughts of buying an oscilloclast for treatment. Even at that time I had a feeling that Dr. Abrams was correct, that vibration from the diseased or toxic molecules explained the diagnostic reflexes or reactions. But the claims of a more than busy Panel practice made further investigations of this sort out of the question and so my only contact with the Radiesthetic field was a look over the hedge.

And so it remained until 1942, when my wanderings really started with an introduction to the Bach remedies. At first I was frankly sceptical. But after a great deal of experimentation I became convinced of their efficacy. To make the test as conclusive as possible I eliminated all other therapeutic factors so that, with only one factor operating, if anything happened, it was due presumably to the Bach remedies and to nothing else. I had some remarkable and dramatic results in a great variety of conditions. In general, I found that in the acute illnesses of children the remedies acted swiftly and surely. This, in the main, was also true of many other acute conditions.

But I found that in the prescribing of the remedies I was up against a real difficulty. To find the right one I had, intellectually,

to assess the emotional condition of the patient. There was Dr. Bach's book *The Twelve Healers* to help me, but I felt it was often a method of hit or miss. The use of the pendulum might have been the solution but I could not use it, and in any case I am far from convinced one does not get what one thinks. By an accident I found the solution in my own case. I found I could use myself as an indicator—a sort of human galvanometer. I cannot always get results, sometimes I seem "dead," and there are no reactions—I have not been able to make out what conditions make for a "live" reaction, and in these circumstances I fall back on an intellectual assessment. I have continued to use the Bach remedies in all my medical work, and especially in psychological cases; I would not now be without them.

A little later I learnt of the existence of the Medical Society for the Study of Radiesthesia (M.S.S.R.) and joining it as a member I came right into the Radiesthetic field, and came in contact with the exponents of Radionic Diagnosis and Therapy—either by machines, such as the Drown or De la Warr or by the use of the pendulum. There is no need to describe any of these as you all are familiar with them and their methods of working. But I must mention one worker in this field—the late Dr. Guyon Richards. I had the opportunity to study his technique and methods at first hand and, later, he was good enough to co-operate with me in the investigation of patients for whom radiesthetic diagnosis and treatment were required. Thus I learnt much from this pioneer and was able to assess in some measure his outstanding work in the radiesthetic field.

In the first flush of enthusiasm I thought that at last I had found the answer to my search for a more accurate and subtle method of diagnosis and treatment. In the hands of Dr. Richards and other brilliant exponents of radiesthesia it all looked so straightforward and conclusive, but time and further experience were to modify my original naive judgment. In particular, the case of a patient I had in 1945, which I reported subsequently to a clinical meeting of the M.S.S.R.

The interest of the case for our present purposes is (i) that it provided an unintentional experiment in comparative radiesthetic diagnosis, as during the course of the illness three independent radiesthetists were asked to co-operate, all of them competent, skilled and experienced operators. The one designated A used the De la Warr machine, while the other two, B and C, used the pendulum, but with a very different technique. Unfortunately, their diagnoses not only did not agree but, what was almost worse, I found it almost impossible at times to correlate their reports with the clinical findings. (ii) For the greater part of the illness I kept a record of the Bovis physical measurement which followed almost exactly the clinical condition and was a very great help in assessing the situation.

I will quote the last part of my report on this case.

" At this point I thought it would be interesting to see what the De la Warr findings would now reveal and, accordingly, on September 13th, I got a report from A. This showed much the same condition as before, except actual T.B. instead of T.B. toxins.

" As the condition continued to deteriorate, I thought it would be well to obtain a third radiesthetic opinion (pendulum), C. This showed cancer in the bronchial and the lymph glands.

" A final check up by B showed nothing serious! Nevertheless, the patient was rapidly going down hill, and a check up by C on September 24th showed a slight improvement, but an extension of the cancer. However, the patient's condition continued to deteriorate, and a final check up on October 5th by C showed the condition much the same, but on October 6th the patient died suddenly." Unfortunately, no post mortem was possible, so which radiesthetist was right remains unsolved.

I suggested that the lesson of this case was that, until it was possible to get more correlation and agreement between various apparatus, methods, operators, and clinical findings in particular, little headway would be made, and we should deserve the scepticism of the critics.

I am glad to say that the importance of this is now being realised, and I know that the main workers are very alive to its necessity, as for example, a practitioner of the calibre of Mrs. Barraclough; moreover, the last few clinical meetings of the M.S.S.R. have been devoted to this correlation.

Another case which rather shook me was one of cancer of which I had the supervision. As a last desperate hope she was having treatment as indicated by a practitioner using a De la Warr machine. It happened that between the sending and receipt of a blood spot the patient died—this fact was unknown to the operator but was known to me. You can imagine my amazement when I received the following report, " There is an improvement in the patient's condition." I made the following comments in a letter asking for further light on what was to me an extraordinary situation. (i) How was it possible to get readings at all if the patient was dead, much less to get readings showing an improvement? (ii) If readings were obtained, as they were, it would appear that they have no basis in fact, the patient being dead. (iii) If this is so, how is one to know that one's readings, while the patient is alive, have any basis in fact? (iv) The only conclusions one could legitimately draw are either (*a*) that the readings are unreliable, that is, they may be accurate but there are no means of knowing when, or (*b*) that they are not readings of physical states at all.

The answer to these comments was (quoting): " That in some cases radionic analysis deals with a body other than the physical

—the etheric or astral—and in that case, death will have no effect on the readings except that one might find some improvement, or at any rate, no deterioration in the condition."

This case seems to me to raise problems of fundamental importance, both of theory and practice. If I understand the present position it is that these readings are not readings of the physical state but of the etheric—whatever that is.

A recent example also is very instructive, as again by accident a good test case was provided. It happened that I had posted my own bloodspot to operators of a De la Warr machine; that same evening I had a motor accident in which I ran down two men, seriously injuring one of them, and as a result I, myself, had severe psychological shock. Next day the bloodspot was tested on the machine, and among other things shock came in very strongly, and its remedy vanadium. The operators stated that they seldom had recorded such a strong reaction,and were puzzled at its strength, for it was not until later that they learned the real cause of their perfectly correct reading. This, I think, is an excellent test case.

Before leaving this subject I should like to refer again to the Bovis measurements. I have found the measurement of the physical and psychic rates of great help and use in my clinical work. The physical one gives firstly the state of the basic physical energy, and it is possible to follow the results of treatment and, secondly, it enables one to differentiate between physical and psychological depletion. For example, a patient complains of weakness and fatigue; if the reading is low I take it that the case is one of physical depletion; if the reading is normal, that the depletion is probably due to psychological or psychic factors.

The main use of the psychic measurement is to give an indication of the type of treatment which may be possible. If I get a reading over 50 I know I am dealing with a sensitive and, if I use radiesthetic or similar methods and treatments, they should be effective.

But I do not think we can as yet accept the correctness of all radionic readings. The difficulty to my mind is to know when they are correct and when they are not. For example, from my own personal experience and observation of such a superb operator as Dr. Guyon Richards I am convinced that while on many occasions he was brilliantly accurate, I am equally certain that on other occasions he was right off the mark. Yet to him all his readings were equally correct; and indeed it is clear that this was a psychological necessity, as, for him once to start doubting the correctness of his readings and findings would have introduced an element of doubt which would have vitiated all his work. I feel sure this is true of all operators.

Thus the problem remains as to how an operator can distinguish between when he is correct and when he is not, and this is par-

ticularly so if one is dealing with the very early stages of disease. There is at present no objective method of checking up on these, as there is in the later stages, when there are objective physical signs ascertainable by laboratory, X-Ray, surgical, or post-mortem examinations. Or even—as there is in Dowsing—the conclusive tests of the presence of water or metals at the spot indicated by the rod. Hence the scepticism of the medical critics and the difficulty of making any effective answer. Yet, at the same time, I am convinced that the findings of radionic diagnosis, by whatever technique, are in a large percentage reliable and correct—but how is one to know ?

About this time the late Dr. Munro lent me his copy of the rare volume of the translation by Prof. Gregory of Reichenbach's *Researches*. This fascinated me, partly because I felt like Keats when he " First Looked into Chapman's Homer "—to paraphrase —" Yet did I never breathe its pure serene, till I heard Gregory speak out loud and bold," and partly, because I was struck by Reichenbach's extreme scientific care and exactitude ; what I can only describe as his beautiful handling of the experimental material, that is, the imagination and ingenuity with which the problems arising were tackled. Like a true artistic scientist when confronted by a problem he asked the right question, devised the right experiment and, as a result, received the right answer. It is only scientists of the highest order who can do this, and so obtain the truth.

That his work was rejected out of hand in the last century was understandable. It was not in tune with the spirit of the times. Electricity and magnetism fitted in exactly with the materialistic expansion of the 19th century ; Reichenbach's work was completely alien to that spirit. But what never ceases to astonish me is that 100 years later when we are studying the very phenomena with which he dealt, his fundamental work is still apparently largely overlooked and forgotten. How else to explain the titles of some lectures given to this Society, *Is there a Force unknown to Science* and *A New Force*, to mention two ; and, further, the curious confusion which seems to exist as to the nature of the force or forces with which we are dealing. We tend to talk in electro-magnetic terms even though we have a feeling we are not dealing with either electricity or magnetism. Lakhovsky is a good example of this—he is firmly convinced he is dealing with electrical phenomena—he compares each cell to an oscillating circuit like a wireless apparatus, transmitting and receiving.

But Reichenbach was quite clear that the force he was investigating was neither electrical nor magnetic nor, indeed, did it fit into any existing category. To quote him " It remains for future investigation to determine whether and to what extent these phenomena will admit of being distributed among or

transferred to the known forces, but in any events we shall never be able to do without the word odyle, or some equivalent term. Such a term, whatever it is, must always be required to embrace a mass of phenomena which cannot with propriety or accuracy be registered save as a peculiar group."

He then proceeds to set down the difference between

(i) Odyle and Heat under 15 heads, ending with the conclusion that " therefore heat must be essentially distinct from Odyle."

(ii) Odyle and Electricity under 15 heads, of which I will mention two. Firstly, the slow rate of conduction, about two yards per second, whereas electricity travels with the speed of light, and secondly, the fact that odyle is conducted by insulators and non-conductors. This quotation from a lecture by Dr. Brunler puts this second point exactly: " If the radiation of the brain consisted of electro-magnetic waves in the region of light, then a silk cord would be the most unsuitable carrier of electro-magnetic waves; in fact, silk being an insulator or non-conductor would make it impossible to obtain readings on the Biometer. Yet silk is the most perfect conductor of these radiations and therefore we must accept it that the radiation we measure is a di-electric one." Or as Reichenbach would have put it " an Odylic one."

Reichenbach's conclusion was " all this shows how great a gulf separates Odyle from electricity."

(iii) Odyle and Magnetism. Here he enumerates 28 heads, and observes in general that Odyle is developed alone without magnetism, magnetism never alone without Odyle. I am sure it is this latter fact, because it has been forgotten, which has been the cause of some part of the confusion into which we have fallen. His conclusion was " for the present, therefore, the identity of Odyle with magnetism is entirely out of the question."

In *Letters on Od and Magnetism* published in 1852 Reichenbach summarises his work on Odyle. This was translated by O'Byrne in 1926 and gives, as it says on the title page, " A complete presentation of the Odic theory."

What conclusions did Reichenbach arrive at as a result of his unique experiments? I will give them as far as possible in his own words—they are important in view of what I shall have to say later.

(i) Od or Odyle not only flows in concentrated form from special sources but it is in addition a general endowment of the whole of nature, a variously shared but universally distributed natural force. Some of the special sources are heat, friction, sound, electricity, light, the moon, solar and stellar rays, chemical action, organic vital activity of plants and animals, and especially man.

(ii) It interpenetrates and fills the structure of the universe, present in the smallest things as well as in the greatest. It

cannot be eliminated or isolated from anything in nature. It quickly penetrates and courses through everything.

(iii) It is a universal property of all matter in variable and unequal distribution both in space and time.

(iv) It possesses polarity.

(v) It can be conducted.

(vi) Bodies can be charged with Odyle or Odyle can be transferred from one body to another by contact.

(vii) Like heat, it has the property of existing in two different states. One which is sluggish, is slowly communicated, and slowly passes through bodies, and that in which it is radiated at a distance. This passes through clothes, boards and walls, &c.

(viii) It is luminous, showing blue at the negative pole, and yellow-red at the positive pole.

In passing, it is interesting to note his theory regarding water-divining. After shaking water in a bottle and finding that Od was produced, whereas there was none if it was still, he says " Something uncommon now occurred to me. Do not be alarmed, dear reader : but it was nothing more nor less than—the divining rod, with all its evil repute ! The water-dowser, spring-finder, came up to my memory. Ha ! said I to myself, if water sets Od in motion when shaken, why should not running water perhaps do the same ! " And he found that it did, and that his sensitive could detect running underground water by a feeling of disagreeable tepidity up her legs as far as her knees, and particularly on the left. That is, an Odic effect in a susceptible body. He says he repeated this experiment always with the same result. According to him, any high sensitive could do this with a little practice, and with no need for a rod or pendulum.

With all this as a guide, my wanderings now became more definite, especially when I turned my attention to the subject of healing and healers, to which I was particularly drawn, having discovered that I myself had healing power.

A feature of modern medicine which is becoming more and more obvious is its ever increasing complexity, fragmentation and specialization. When I compare what I had to know as a medical student with what my son has had to know only 25 years later I am appalled. I hardly dare to think what a medical grandson may have to know in another 25 years' time. Indeed, my son tells me that we have virtually reached the limit of what it is possible for a student to encompass in the time. It is clear that we have reached the point when, if we are not to be overwhelmed with facts and data, there must be some fundamental simplification.

From Greek times onwards there has been the conception of a power or force within the organism which does the healing—all the physician can do is to co-operate with this force—the *Vis Medicatrix Naturae*—to restore the patient to health. And

certainly from mediaeval times there has been the idea of an Elixir of Life, the divine water, the universal panacea for all maladies.

Is it too daring to think that possibly we already have this power, this elixir which, if we understood more about it and how to use it, would give us that simplification without which medicine will founder in a plethora of analytic data? I venture to think we have, and I find that I am not alone in thinking so. Mr. Benham in a paper read to this Society in 1946 said "The possibility of treating successfully every single disease known to science using a single healing substance as the source of radiation, is now definitely within sight."

Where was this "single healing force" to be found? Might it not be among the healers?

Fortunately, my wanderings brought me into direct contact with many workers in this field, in particular with Mrs. Kingsley Tarpey, Mr. Eeman, Mr. Harry Edwards and others.

I have been privileged to see a great deal of Mrs. Tarpey's work, both as a collaborator and as an observer. A great asset is that, unlike many healers, she takes an objective and scientific attitude to her work. She is, in my opinion, a healer of outstanding power and performance, both in the physical and mental fields. Some of her cures border on the miraculous. An unusual feature is that the healing power seems to be independent of her own physical state and is unaffected by age, its use does not deplete her; if anything, she is more vigorous after than before. It seems to me a pity that no definite and sustained study has been made of her powers, as she cannot, in the ordinary course of nature, be with us for many more years.

Equally interesting and important is the healing which undoubtedly results from the use of pictures painted by her, the potentizing of oil, wool, bandages, &c., and other examples of storage and conduction. It is to be sincerely hoped that she will realize her ambition to establish a picture-healing centre, by which she can bequeath to suffering humanity her healing power, even after her bodily disappearance.

Another healer with whom I obtained contact was Mr. Harry Edwards—the well-known spiritual healer. I satisfied myself that he was a genuine healer, that is, a special source of the Odylic force in its healing aspect, in spite of the fact that he attributes his power to disincarnate spirits working through him, but this I take to be a dramatization of the power. I even was fortunate enough to get him to agree to a special demonstration before the M.S.S.R., but unfortunately the cases were not followed up systematically, and so the demonstration had no scientific value.

Later I came to Mr. Eeman's work. This is well known, and needs no description, but there can be no question that he has added very considerably to our knowledge of the rationale of

natural healing by his indefatigable research work. Personally, I have no doubt of his claims in co-operative healing, and it is to me a scandal that there is no responsible body in this country which will investigate and test them out. As he truly says, one morning in a fever hospital would establish the truth or otherwise of his claims, and the enormous advance which would result in the acquisition of immunity and the treatment of acute diseases. But, so far, no one has even had the scientific curiosity to try them out. And we are supposed to be living in a scientific age!

In my view, Mr. Eeman's work is a direct application, under special conditions, such as complete relaxation, correct polarity, re-enforcement of the power by additional bodies in the circuit, of Reichenbach's Odylic force. I am not certain, however, if Mr. Eeman is sure about this himself, as I see in a recent article that he talks about "quasi-electro magnetic bi-polarity." I think this idea may have been fostered by the use of copper wires—the point could easily be settled, as I have already suggested to him, by using silk cords instead of wires. If it still worked, as I think it would, then we are dealing with Odyle and not electricity or magnetism.

There is also another point, namely, that while it is clear from Mr. Eeman's work that co-operative healing is a fact, I am convinced that some people, as for example Mrs. Tarpey, have this power in a special sense or a special degree. It is as if one were to say "we all are musicians," but actually it is only a few who have the gift in a special way. So that in this sense it is not true to say we all are healers any more than it is true to say we all are great musicians. The explanation of this is, I think, provided by Mr. Benham in his paper* to this Society in 1946 on *Interpretations of Para-Physical Measurements*, in which he stated that there are six what he calls the para-physical readings in the aura. The healing may occur from the third to the sixth, but the best position is the sixth and the next best the fifth. It is only the rare individual who has it in the sixth position, and is then what is recognised as a healer. In other words, there are degrees and qualities of the healing power.

At this point I thought it would be interesting to look into the problem of the miracles in the light of our radiesthetic knowledge. This I did, and the results of my investigations I presented to a meeting of the M.S.S.R. What emerged is, I think, a good example of what Mr. Maby so eloquently pleads for in his pamphlet *The Borderland between Classical Physics and Metaphysics*. We have reached the absurd position that it is the metaphysicians, as represented by this and allied societies, who are exploring the physical aspects of psychic phenomena; whereas the materialists still either deny the phenomena or put

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* *B.S.D.J.* VII, 54, p. 91

them all down as mental or psychological. Whatever, for example, may be the spiritual, psychic and psychological ingredients in the production of a miracle I am convinced that it operates through and in a physical vehicle, such as the Odylic force. This being so, I have suggested a new definition of a miracle, namely, " A Miracle is the operation of normal processes, restoring normality, speeded up until the time element is completely eliminated." From this it follows that there is every gradation of healing from the ordinary to the miraculous, according to the acceleration of time. Or, to put it in another way, the healing processes are speeded up to such a degree that, instead of happing in sequence, the whole thing becomes instantaneous. In my view, a supreme healer, such as Christ clearly was, could do this, as can other healers to a lesser degree. But in all cases a physical force is used as the means, that is, results are not simply due to suggestion, faith, spirits, &c., as is usually believed.

In the autumn of 1948 my wanderings led me to the writings of Dr. Wilhelm Reich, originally an Austrian medical man, a psychologist and disciple of Freud. I gathered he was not regarded with favour either among the laity or the profession. I wondered why. The reading of *The Discovery of the Orgone, Vol. I, the Function of the Orgasm and Vol. II, the Cancer Biopathy*, soon showed me why. To anyone not already familiar with radiesthesia and allied phenomena the books would appear not only incomprehensible but distinctly bizarre, especially as his views lead, and have led, to a head-on collision with orthodoxy, especially in the realms of sex.

As I read on my interest and wonderment grew, for here, unless I was much mistaken, was a re-discovery of Reichenbach's work and its elaboration and elucidation in present-day radiesthesia, but approached from an entirely different angle. So different, indeed, that Reich, nowhere, gives any indication that he is aware of other discoveries and work in this field. It is as though Reich, approaching from the Pacific, re-discovered what Reichenbach and others have already discovered from the Atlantic, and it is only because we happen to be on a radiesthetic peak in Darien that we know that it is one and the same unexplored continent.

But I shall be giving an entirely false impression if I lead you to believe that Reich is dealing only with radiesthesia. His range is far greater and already covers a vast field involving Physiology, Pathology, Bacteriology, Psychology, Biology, Cancer Research, Physics, Meteorology, to mention a few.

I shall not attempt to deal, even in outline, with his development of psychoanalysis into sex-economy through the orgasm theory to character analysis leading to vegeto-therapy thence to a comprehension of the biological basis of neurosis, and, finally, to what Reich calls medical orgone therapy—a therapy

which uses *the same fundamental energy and technicque whether dealing with a neurosis or a cancer.* His conclusions are frankly startling and revolutionary and, therefore, highly controversial alike in the sphere of physics, of medicine, of education, of sociology, of politics.

The most I can do is to deal very briefly with the question of this fundamental energy. I may say at once that Reich claims to have discovered this force, unknown to orthodox science in 1939, and has called it Orgone. (This name, he says " indicates the history of its discovery, namely, through the orgasm formula, as well as its biological effect, that is, of changing organic substances"). It is to my mind the same as Reichenbach's Od or Odyle, Brunler's Di-electric energy, and the force with which all healers are so familiar.

Between 1936 and 1939 Reich did a great deal of experimental work and discovered and observed what he called the Bion. Bions, he found, were invariably produced if matter is heated to incandescence and made to swell, they are also formed, but more slowly, when any matter, inorganic or organic, disintegrates and breaks down. " Bions " to quote Reich, " are microscopically visible vesicles of functioning energy and are transitional forms from non-living to living matter. The bion is the elementary functional unit of all living matter. It carries a certain amount of orgone energy which makes it function in a specific way biologically. It is a unit of energy, consisting of a membrane, liquid content and an amount of orgone energy—it can be called an ' orgone energy vesicle'." The bions are constantly being produced from disintegrating matter and can develop into protozoa or degenerate into cocci and bacilli. The colour of the bion is, as you would anticipate, an intense blue. " Every living organism," according to Reich, " is a membraneous structure, which contains in its body fluids an amount of orgone : it is an orgonotic system."

For those who are interested in the Béchamp-Pasteur controversy it may be noted in passing that it may well be that Béchamp's Microzymas are the same thing as Reich's Bions. You will remember that Béchamp claimed that his Microzymas were the antecedents of cells, the up-builders of bodily form, the real anatomical, incorruptible elements and that, after the death of an organism, the cells disappear, but in their place remain myriads of molecular granulations, otherwise Microzymas.

Up to this point, although Reich had observed the above reactions of bions and bion-cultures, he was not aware he was dealing with the manifestations of a specific biological energy. But in 1939 he was working with ocean sand and found that from it, by his special technique of bionous disintegration by incandescent heat and swelling, he could obtain a pure culture of special blue bions, what he subsequently called Sapabions, which

exhibited an energy with an extraordinarily intense biological activity. In a long series of experiments he identified this with sun-energy, which is present everywhere, and this he found to be the same energy as that in the living organism which takes it up from the atmosphere and directly from the sun or, as he puts it, "the energy which governs the living is of necessity identical with the atmospheric energy." He then argued that if energy is in the atmosphere everywhere it should be possible to demonstrate it, and so he invented what he calls an Orgonoscope, and other apparatus for the ocular demonstration of Orgone.

The question then arose as to whether it was possible to concentrate the atmospheric orgone. He found this was so, using two properties of orgone, (i) that organic material attracts and absorbs it, and (ii) metallic material, especially iron, attracts but repels it again rapidly, that is, reflects it. He therefore built a box, the outside of which consisted of organic material and the inside of metallic. Let me quote: "Since the former absorbs the energy while the latter reflects it, there is an accumulation of energy. The organic covering takes up the energy from the atmosphere and transmits it to the metal on the inside. The metal radiates the energy to the outside, into the organic material and to the inside into the space of the accumulator. The movement of energy towards the inside is free, while towards the outside it is being stopped." In other words, we have an Orgone accumulator, of which more later.

Reich has now gone further. In the last issue of the *Orgone-Energy Bulletin* he suggests that the Ether of classical science and Cosmic Orgone Energy may well be one and the same thing. "It is," he says, "amazing to find that most of the characteristics of Ether, which have never been observed directly, coincide with many characteristics of the Orgone, which have been observed directly and reproduced experimentally." Dr. Brunler, I see, makes a similar suggestion with regard to what he calls the Di-electric energy.*

Here are four out of several characteristics or functions of the Cosmic Orgone Energy, mainly in Reich's own words (please compare with Reichenbach's claims for Odyle as recorded earlier on).

(i) Orgone energy is present everywhere and it forms an uninterrupted continuum. It penetrates everything, though at varying rates of speed. It is basically different from electromagnetic radiation.

As far as life is concerned, the living organism is an organised part of the cosmic orgone and possesses special qualities we call "living." It has an organomic potential brought about by the fact that orgone energy flows from a weaker or lower to a stronger

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or higher system. Each type or species possesses its specific energy level, that is, it has orgonotic capacity. All surplus energy is discharged, hence there is an orgone energy metabolism.

(ii) Orgone energy is always and everywhere in motion. Movement, dynamics, functionalism, changeability constitute specific qualities. Within the framework of this mobility there are three main motions: (*a*) Wavy motions, (*b*) Pulsations, and (*c*) a West-East movement of the atmospheric-orgone envelope.

(iii) It transmits orgonotic excitation with the "speed of light"; but light itself is an appearance of orgonotic lumination and is of *local* character. It has also the property of autogenous lumination. This can be observed in a room of complete darkness, when it appears a bluish grey, or in a pressure vacuum tube, when the colour is a deep violet or blue. (Note the blue of the bions). It is worth noting that both Reich and Reichenbach have thought the Aurora Borealis is due to this force. According to Reichenbach it is positive Od light generated spontaneously by the positive North pole of the earth.

It is very strange that nowhere does Reich record having observed the yellow-red of the southward pole of a magnet or of the left hand or the left side of the human body, as observed by Reichenbach's sensitives on innumerable occasions. But what is even stranger, is the fact that Reich has not, as far as I can ascertain, found any basic polarity of the orgone such as Reichenbach found was an essential property of the Odylic force—a property used so successfully by Eeman in actual therapeutic work.

(iv) There is a motor force in orgone energy capable of setting a motor in motion. This may be of the greatest significance.

It may be useful at this point to pause and examine for a moment the occult tradition on these matters. The teaching is that at least three separate and distinct forces emanate from the sun and reach our planet. They are: (i) Fohat, or Electricity, convertible into electricity, magnetism, light, heat, sound, chemical affinity, motion, &c.; (ii) Prana, or Vitality; (iii) Kundalini, or Serpent-Fire.

If one reads the occult description of Prana little doubt can be entertained of its identity with Reichenbach's Od and Reich's Orgone and, if so, it has at last an objective scientific reality and is no longer simply a metaphysical conception.

In regard to the Serpent-Fire I throw out this suggestion, that it is possible that Reich is confusing Prana with this, and that what he calls "orgastic potency" is the release of the Serpent-Fire, and not just the manifestation of Prana or Orgone as he appears to think. If this should be so, it would explain the intense resistence to its release which Reich has encountered—what he calls the "emotional plague" as, according to occult tradition, to arouse it prematurely, before a certain stage of

development has been reached, is to run into very serious dangers. To quote "Ambition, for example, in the mental body is very readily roused and grows to an inordinate degree. Together with great intensification of intellectual power there comes abnormal pride."

So much for the theoretical conception, but Reich claims that the orgone can be used for therapeutic purposes, and is indeed the most fundamental healing agency yet discovered. Physical orgone therapy can be applied in three different ways: (i) The orgone accumulator in which the patient sits once or twice daily with or without clothes for periods of 15-45 minutes; (ii) Local application. In this case the orgone energy is led from a small accumulator about one foot cube through a flexible tube with a funnel at the free end which is applied to whatever spot it is desired to irradiate; (iii) Local orgone irradiation with earth bions—the old-fashioned mud-pack but using specially prepared bionous earth.

For the last ten years Reich has been treating advanced cancer cases by means of the orgone accumulator, with impressive results. Indeed, the translator of his books, Dr. Wolfe, goes further and says that Reich "has discovered the etiology of cancer and opened a way for its cure and prevention." Reich himself says "that as far as orgone therapy of cancer is concerned it had at present reached the point where it deserved to be taken out of the experimental stage and put on a large-scale practical basis."

But I must not venture further at this time into this vast and controversial field, nor even into the large amount of work which has been done on all sorts of diseases other than cancer—the extent and range of which makes it look, if the claims are substantiated, that we have here the veritable Elixir of Life.

The possibilities, you will agree, are stimulating and intriguing.

I was fortunate enough to obtain an orgone accumulator for research purposes, but my supply of suitable patients has been limited, and it is far too early to express an opinion of the therapeutic results, but one set of observations may be of interest at this point.

I had been giving a T.B. patient healing treatment, when it occurred to me, if my assumption was correct—that the same basic force was involved—that the accumulator would be interchangeable with my own treatment. I knew already that this sent up his physical rate, measured by the Biometer, about 20 cms., and I expected the accumulator to do much the same. But to my astonishment it did the reverse, and appeared to extract energy. For example, his physical measurement before going into the accumulator was 24, he was in for twenty minutes, and then his reading was 23, 1 hour after 22 and next morning 21½. By the evening he had recovered somewhat and had gone

up to 23½. I thought this curious result was possibly peculiar to the patient, or had something to do with his complaint, so I got three healthy volunteers to repeat the experiment. Here is the result, 20 minutes in each case :—

	before	after	3 hours later	next a.m.
No. 1 ..	28	26½		
No. 2 ..	27	25½	25	27
No. 3 ..	29	26	25	28

so it is clear that there is a loss of energy, measured by the Biometer, which continues after leaving the accumulator and takes 12 hours or more with healthy people to come back to normal. At the moment I do not know what is the significance of these findings, except that orgone treatment would appear the reverse of healing treatment, a curious result if both are healing agencies and presumably the same force !

And here for the time being I must leave my pilgrimage But I find I have wandered into a realm the possibilities of which defy the imagination. For in this force, by whatever name we call it, we appear to have the secret of life and therefore the secret of health—that state of dynamic equilibrium of the entire organism which is wholeness, " the living of a full functional existence in which development proceeds according to potentiality."

It seems to me that the possibility of such a life and living may be nearer than we think. When we look out on the present terror-stricken, disease-ridden, semi-insane world, such an idea itself seems mad, but behind the black night the dawn of a new age may be breaking.

Let me quote a contemporary writer : " The New Age . . . will be the dawn of a new civilisation, the solar civilisation. I call it the solar civilisation because it will recognise man is constructed of Light—in body, mind and spirit ; that our solar system is a light-energy system . . . Science itself is in flux, and because of that the new science of the coming solar civilisation is possible. While science was hide-bound and dogmatic in its concepts of time, space and matter—especially matter— no new move was possible. Now everything makes ready for the dawn-break of the new age."

I cannot help feeling that if the human race is menaced, as it is, with complete destruction by the diabolic and demonic power of atomic disintegration—the atomic bomb—yet God in His mercy, in this our hour of need, has revealed a beneficent, creative power even greater—call it Odyle, the Cosmic Orgone Energy, or what you will—and this power will come to our sick and dying age, to a distracted, bewildered, frightened humanity, as the cup of salvation, and with healing in its wings.

NOTES AND NEWS

The following is an extract from a letter in the *Rand Daily Mail* of June 11th, 1949, written by Mr. N. B. Macmillan, O.B.E., B.Sc., A.M.I.C.E. It was in reply to a letter from Dr. J. van Eden, a Government geologist, which contained derogatory remarks about the practice of dowsing.

" I may be pardoned if I mention that I too was once a sceptic like Dr. Van Eden, but one day, while cynically demonstrating my scepticism, I discovered with a shock that I possessed the uncanny gift myself. I shall never forget the profound feeling of humility which came over me as I felt a force acting upon me from outside, and without my volition. It happened in India, the divining rod having been cut from a mango tree. I now use a steel spring, as being more convenient. The material of the spring doesn't seem to matter.

Space does not allow me to recount the many exciting experiences I have had with my steel spring, but I think Dr. Van Eden would be interested to hear of the occasion when a boring plant had bored to a depth of more than 200 feet without finding water. Up to that moment the adviser had been a professor of geology. I was asked by a friend to help, as the professor had withdrawn from the contest. I found that the borehole was not situated on a stream of water, but I found a good stream about 120 yards away which, when tapped, produced over 2,000 gallons an hour.

And then there was the occasion, in 1938, when I located the magnetic reef which passes through the Witwatersrand University. This I did in the presence of a distinguished lecturer in physics at the university, who verified with his magnetic compass the line I had marked out. He is no longer at the university, but is now in Government service and probably as big a sceptic as Dr. Van Eden !

* * * *

Colonel D. M. Hennessey writes from Naivasha, on January 10th : " I have recently discovered an interesting point in dowsing of which I was previously ignorant though probably it was known to other dowsers. In both Mauritius and Tanganyika I have had to dowse for water and minerals over ground on which the bush and grass had been burnt down some time during the previous two weeks, and in every instance I found that the dowsing faculty was exceptionally active and easy to carry out over the

burnt area. I will be most interested to know why this should be so, if other dowsers have had the same experience and what it means."

Can any member suggest an explanation ?

* * * *

Mr. H. R. Rosenaner has sent us the following note on Radiesthesia applied to plant ecology :—

(Ecology is the branch of physiology which deals with the mutual relations of living organisms and their environment. It is the science of the interaction of organisms).

Growers and Planters do not seem to appreciate the science of ecology. They continue to grow and to plant by means of empirical selection—the hit-or-miss method—which may result in an important loss of time and material because seeds and plants do not always agree with, or grow in, a given soil.

When fruit trees are wrongly selected the waste is even worse. I have seen big orchards scrapped in the fruit-growing regions in Southern France, after the growers had waited several years for a yield, only to realise finally that the fruit variety selected would not thrive in their soil.

Generally speaking, no ecological tests are made because the orthodox school has not yet been able to devise a simple, practical test method ; yet an ecological test method has been applied in France and in the French Colonies since several years, but only by a few progressive growers. Professional, conservative growers consider this method unscientific because theoretically it is not yet explained, but the French scientist Charles Richet said, " The facts first, the theory afterwards, if possible."

This test method is based on radiesthesia (dowsing), combined with chromo-differentiation. The analysis is simple, quick and precise : a few seeds, a small branch, are confronted with approximately half an ounce of soil, and, checked with a detailed map of the ground, this gives the indication of what to plant.

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An interesting correspondence on dowsing has been going on in the *Farmers Weekly*, Bloemfontein, the main contributors being Dr. V. L. Bosazza, of Johannesburg, who has a poor opinion of dowsing as he finds it, and Mr. N. B. Macmillan, who in one of his letters writes as follows :

" I had a rather interesting case some years ago on a friend's farm near Pretoria. I found that two streams ran through the property, converging to a point within six feet of each other and then diverging again. At this point, my friend drilled a well on one of the streams and found about 2,000 gallons an hour at 175 feet. As he wanted more water, he drilled another well on the other stream, six feet from the first well, and found 1,400

gallons per hour at the same depth. The last 50 feet or 60 feet of both wells were in diabase. He installed a turbine pump in each well, and still obtains the above quantities to-day, showing that there is no seepage between the streams (which are probably branches of one and the same stream, the junction being somewhere outside the property)."

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In the *Hindu* of August 20th a letter from K. S. Sursinji, retired Director Agriculture, Saurashtra, describes the aims and objects of a projected Indian Society of Dowsers.

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A note in the *Civil and Military Gazette* of October 13th describes how an inhabitant of Nawanagar, known as the Paniwala Maharaj, helped to solve the problem of finding additional water for 15,000 inmates of the Faridabad Camp, 17 miles from Delhi. He indicated six spots in all. At the first spot indicated a rotary drilling machine working for 22 hours made a borehole 480 feet deep from which it was estimated that 20,000 gallons per hour would be available. He would only accept a small basket of mangoes as a fee!

* * * *

The *Birmingham Gazette* of November 1st mentions an address given by Mr. W. G. Lines (B.S.D.) on water divining to Bilston Rotarians on October 31st.

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The *Sunday Express* of November 13th contained an article referring to the cure for gout, lumbago and other ailments which was successfully practised by the late Dr. E. Martin. One to benefit by it was Canon F. H. D. Smythe, of Haywards Heath, who, the reporter states, has written an illustrated pamphlet about the method for private circulation.

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A short paragraph in the *Evening News* of November 15th records that Carl Knudsen, a water diviner of Elsinore, Denmark, is setting off to Africa to find water.

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The *Worthing Herald* of December 29th contains an article, with an illustration, about a water divining apparatus designed by M. K. Klimacki, a Polish engineer, which was being used for locating water at Beggars Bush, Sompting, by the George Stone, a firm of well borers, of Slough.

At the end of December and beginning of January there were references in numerous papers to the search for the five-year-old boy, Samuel James Poole, who was missing from outside his house in Wolverhampton since the afternoon of Christmas Day.

On December 30th Mr. Samuel Bloor (B.S.D.) offered his services to the Police, and using a pair of the boy's shoes as a sample, tried to trace the boy in the canal at Bushberry Pool.

Two other water diviners, Mr. John Clarke (B.S.D.), of Ab Kettleby, who has frequently been successful on such occasions, and Mr. W. Barnett, of Hickling, arrived on January 2nd, and joined in the search. All three dowsers got indications on a stretch of the canal at Heath Town, which had already been dragged three times, and this section was dammed off and pumped out by the Fire Brigade, but without the body being found. The body was eventually brought to the surface by the tow rope of a barge three quarters of a mile from the boy's home.

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The following is an extract from *The West India Committee Circular* for January, 1950:

"Mr. Vernon Henriques, a member of the firm of Henriques Bros., and brother of the Hon. O. K. Henriques, died after a long illness on December 8th at the age of 67. An able engineer, he was connected with Kingston Industrial works from its foundation in 1908. He was a 'dowser' and his attempts at locating water supplies were extraordinarily successful. The funeral on December 9th was one of the biggest ever seen in Kingston."

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Mr. R. Huntriss writes as follows: "My attempts at depthing a small stream in my garden, the line of which was known, indicated that water might be found at a depth of 3ft. 6in., so I dug at the spot as an experiment. No water was found, but at 3ft. 4in. were the remains of a dog which had been buried there. Coincidence, perhaps, but the almost exact estimated depth with that of the dog is certainly interesting."

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Mr. Barton Hart, of Boston, Mass., has described in a letter of January 2nd how he went over an old chair with his rod before it was opened up to be reupholstered. The result was the discovery of a small pin and a silver dime; the latter was kindly sent with the letter.

* * * *

One of our members was the fortunate discoverer of a tiny pendulum inside a Christmas cracker. It was described as a "Sex Detector," and instructions for its use enfolded it,

REVIEWS

THE DISCOVERY OF THE ORGONE. Vol. 2. THE CANCER BIOPATHY

By Wilhelm Reich, M.D., Orgone Institute Press, New York, and Biotechnic Press Ltd., BCM/Biotechnic, London, W.C.1.

We make up a solution of 50 per cent. bouillon and 50 per cent. Potassium Chloride, all fluids autoclaved at 120° C. and all substance and tools sterilized at 180° C, and then we heat on a spatula tip in a gas flame some coal dust to white incandescence. Then we immerse this now sterile material into the sterile solution. What happens? You and I and every intelligent schoolboy can answer this. But seemingly we shall all be wrong. Here is the answer Dr. Reich gives us.

The fluid becomes black, and we have obtained a colloidal solution which in the course of half an hour becomes grey and in from three to six days becomes clear, all particles having sunk to the bottom. If, immediately after making the preparation, we take a drop, under sterile precautions, and study it under the microscope we see small vesicles, of about one micron diameter, detach themselves from the larger particles and move freely in the field. Before our very eyes the small particles (? vesicles) undergo change. At first rigid, with a thick and black membrane which becomes thinner; then the inside takes a blue or blue-green shimmer. Vivid motion is seen within it, and soon movements appear of expansion and contraction, pulsation and movement, within and without. If we pass a galvanometer current of about half a milliamp through the solution the vesicles move towards the cathode, i.e., they are positively charged.

Soon around the vesicles just described much smaller vesicles, about one fifth the size, 0.2 μ in length, appear but they are elongated and with one end pointed like a small lancet. These are Gram-negative and show red when stained, whereas the larger vesicles react positively (blue with Gram stain).

From the experiment just described Dr. Reich has sprung the whole amazing story of Orgone research with its orgones, bions, orgone accumulators and other strange terms which come to us from the U.S.A., fortified by an institute with extremely well-produced literature of its own, a record of experimental work extending over seventeen years, with representative branches in other countries.

The suggestion, of course, is that from sterility life has been produced. In fact, Dr. Reich affirms that "all matter if heated to incandescence and made to swell consists of, or disintegrates into, blue vesicles." I confess that when I read of the vesicles running about I said to myself they were merely Brownian movements, and put the book down. But the further movements, and particularly the internal ones, negative the suggestions that Brownian movements, which are common to small colloidal particles, are concerned at any rate more than very temporarily. The main movements undoubtedly appear to be derived from internal energy. So we are faced with the startling proposition that seemingly *what we call Life is not necessary to produce living. That inanimate objects can of themselves produce Life!* Just as we know that they can produce Death.

Death, indeed, is the associate of the negative red-stainable, pointed, smaller vesicles. Dr. Reich calls them T-bacilli (T for Tod, German for Death) because they have a two-fold connection with the processs of dying. They originate, he tells us, from degeneration and putrid disintegration of living or non-living protein. Injected into mice they will kill within twenty-four hours. He declares, too, that any kind of cancerous tissue shows T-bacilli on microscopic examination, and gives T-bacilli culture in bouillon or on agar. Indeed, T-bacilli, it is stated, act as a stimulus for the change of normal cells into cancer cells.

The larger vesicles, those that are positive and bluish in colour, are the bions, and they seem to possess amazing properties and powers. They are not complete living beings but only carriers of biological energy; forms of transition from non-living to living. As the blue disappears the biological characteristics of the bions disappear also. But if the test-tube experiment is performed without the preliminary destruction by high temperature of any already existing life the blue vesicles are not formed at all.

As research went on, understanding increased and production improved, until in 1939, using ocean sand instead of coal dust, and Caustic Potash and Potassium Chloride to help the swelling process, bions were produced of such increased power that radiation from them whilst he was examining them gave Dr. Reich violent conjunctivitis; and even supporting the culture on a quartz slide upon the palm of his hand produced a tickling felt through the interposing quartz, followed a fortnight later by the palm becoming strongly inflamed and very painful. Next it was noticed that all metal objects, such as scissors, pincers, needles, &c., became highly magnetic. Photographic films became fogged. There was complaint that the air in the room where the cultures were kept had become extremely "heavy." Headaches were rife, and people's eyes began to see strange sights.

Yes! A very powerful energy was at work, and it all came from the bions! *This energy is the Orgone.*

Much is told us of the doctor's research into the nature of this energy and how to use and concentrate it. The energy from the cultures had spread to everything around; to gloves, papers, cotton. They all took up the energy and could produce with it action at an electroscope. Indeed, later on a Geiger counter was employed. "Obviously I was dealing," he declared, "with an unknown energy with a specific biological activity . . . originated from matter which was heated to incandescence and made to swell. It came about probably through disintegration of matter . . . it was radiated into the atmosphere by the sun, consequently it was present everywhere . . . the living organism takes it up from the atmosphere and directly from the sun. It was the same energy with which my blue bions killed bacteria and cancer cells, only here the energy was contained within the small blue vesicles . . . Now I also understood the blue-grey vapours which I had seen in the dark around my head, hands and short-sleeves. Organic substances absorb the orgone energy and retain it."

Most of the book is concerned with the medical aspect of the Orgone as a source of biological energy, and thereby as a means to increase

the natural defences against disease. But first it is necessary to obtain the orgone in adequately supply, and this is accomplished by construction of what are termed orgone accumulators equipped with an ingenious means of gauging the supply, a means which, incidentally, the doctor claims, proves that the orgone is not any form of electricity.

One main purpose of this book seems to be to advocate general use of these accumulators as instruments of health preservation and thereby to check in particular the development of cancer. The doctor wants to see an accumulator installed in every home, and used to " maintain organotic potency of the organism long before the development of T-bacilli or even cancer cells." Elsewhere he says " Even the healthiest organism contains T-bacilli and has the tendency to putrid disintegration. The disposition to cancer then is universal." But " so long as blood and tissues are strong in orgone every developing T-bacillus is destroyed and eliminated before it can multiply and do damage." W.E.H.H.

PREMIERS PAS EN RADIESTHÉSIE THÉRAPEUTIQUE

By Enel; Al-Maaref; Cairo; pp. 109

Much of this book is devoted to colour frequencies and to showing how they enter into all dowsing phenomena. We have positive red and negative blue, and, in fact, the whole range of spectroscopic frequencies and other frequencies outside the visual range. If you take two hemispheres and place them separately with their flat surfaces or bases in a vertical plane and arranged in a North-South direction, but with one base facing East and the other West, according to the author colour reactions will be found around the horizontal half-circumference of each hemisphere in the order of the spectrum, but with the red to the North and violet to the South in one case, and with this order reversed in the second case. The author develops the idea that the earth's magnetism enters into all such phenomena. Incidentally, the East and West references on page 97 do not agree with the diagram.

According to the author, everybody has his own individual colour radiation, being the sum total of all his radiations. In diagnosis and treatment work as described, the operator holds his pendulum with a length of string tuned, or synchronising with, the colour of the patient. These string lengths vary between white (greatest length) and black (shortest length), with intermediate points as representing different people's colour frequencies being, from the top downwards, violet, indigo, blue, green, yellow, orange, red. To find the colour of a person you hold the pendulum over his left hand, palm upwards, and adjust the string length until it gyrates clockwise. The pendulum should already have been calibrated with the help of coloured ribbons, and the colour of the individual is thus found. To verify it, turn the back of the hand upwards, when the pendulum should oscillate over it in the direction of the fingers. In a footnote it is said that for a woman the pendulum should be held over the *right* hand, as her polarity is opposite to a man's—except at the menopause. Reservations of this kind, though perhaps necessary, are not conducdive to reliable

testing. Moreover, it is said that a patient when tested should always face North, but surely it could be equally argued that following Abrams's researches, the patient should (if anything) face West. A hand chart is reproduced in the book which not only bears no resemblance to that of Bovis, the pre-eminent authority in this field, but is quite different from that published in *Traité Pratique de Radiesthésie* by L. Chouteau, which equally seems to be something quite on its own. One would, in fact, like to know how these charts are arrived at.

The chapters on treatment describe several methods, including the application to an affected part of coloured material, and the drinking or application of water exposed to coloured light. For instance, orange is said to be purgative, blue having the opposite effect. Only these two colours are recommended for internal use. Green-irradiated water is said to be a good disinfectant, red is good for hot compresses, while blue is soothing and can presumably be used for compresses to reduce inflammation. The author describes his colour technique for the choice of diet and remedies. For colour radiation a table is given showing the reaction to be expected of a particular colour on a person having his own individual colour, so as to avoid possible harmful effects. In a chapter on microbes a list of a few diseases is given with their antidotal colours.

One chapter is devoted to the Universal Pendulum, which can be adjusted to colour frequencies working on three different systems. What is known as " green-negative " is said to have a radiation stronger than all the other colours, and it appears to be harmful to human beings. It will mummify meat or fish, and is said to appear in nearly all magical objects used by the ancients, and in the Great Pyramid.

The author deals in an interesting way with many dowsing problems, such as neutral pendulums, " disinfecting " the pendulum, colour combinations, the differentiation between radiations due to colour and those due to form, and magnetic treatment with the hands. If we cannot accept all the statements made, and even if the methods of treatment given will not recommend themselves to most practitioners, this is a book in which the radiesthetist can browse happily, for he will find in it much to interest him. V.D.W.

REVUE INTERNATIONALE DE RADIESTHÉSIE, No. 15

Le Fluide Vital, facteur capital dans chaque manifestation radiesthésique, by G. Blahovsky. The author considers that research in connection with the movements of the rod and pendulum must be incomplete as long as the part played by the Vital Fluid is neglected. He refers to the ideas on this fluid held during the middle ages from Paracelsus to Mesmer, to the researches of Reichenbach, to the prana of Hinduism and to the modern hypotheses which hold that the fluid can be directed by thought to effect cures, as in the miracles of Christ.

La Syntonisation en Radiesthésie, by Lieut.-Colonel Stevelinck. This deals with the experiments of M. Bignand of Dijon which involve the dissolving of metals in activated water.

La Santé des Plantes, des Animiaux, by R. Louis Joly. A continuation of his article in No. 13. He refers to the measures taken to

maintain a healthy livestock in France by means of a well-organised veterinary service, the first veterinary schools having been started in the 18th century. He points out that equivalent services do not at present exist to ensure the freedom of the cultivation on which the livestock depends from the attacks of insects and diseases, services in which radiesthesia would play a useful part.

In *Etudes Techniques et Scientifiques*, J. Dejond cites from a little book *Electrons in Action* by J. G. Daunt, a lecturer on Physics at Oxford, examples of the expulsion of electrons from metals by the photo-electric effect, by polishing and by the action of magnets—phenomena which can in every case be detected by radiesthetic methods.

La Signification physiques des mouvements dextrogyres et lévogyres du pendule, by P. de Bondy. He shows how the same movement can denote opposite conditions according to the *arrangement* of the objects examined, as the movement denotes merely the direction of the train of waves.

Une Expérience de Radiesthésie Physique sur l'Origine du Mouvement du Pendule, by Comte. J. Cotta. A description is given of an experiment designed to show the force acting on the pendulum when the intervention of the mind can be assumed to be absent. The force was taken as " g " in the formula $t = \pi \sqrt{\frac{l}{g}}$ and was calculated in each of a large number of observations by noting " t " with different lengths of pendulum over a metal strip. It was found that for a length of 22 cm. the force appeared to be constant.

(This article is difficult to follow)

Le Selecto-Corrector, by M. Monteiller. He considers that the best position for work is facing north and that the few errors which even then occur can be corrected by this instrument. It consists essentially of four magnets in a little wooden box, a variable condenser and a graduated semi-circular dial.

Expériences Radiesthésiques au moyen de la Cellule Photoélectrique, by J. Dejond. A little lamp sends out photons to a photoelectric cell through a metal screen with a slit in it. Electrons are expelled from the cell onto a nickel wire and the current when amplified can make a bell ring. The pendulum reacts over the cell either directly by the electrons or through secondary radiation, but is stationary when a sheet of lead is interposed. If a radioactive substance such as uranium replaces the lamp, the pendulum reacts as if the expulsion of electrons was caused in the usual way. A most interesting experiment was made with a *photograph* of a specimen of uranium. The uranium was placed on a photographic plate wrapped in black paper and the whole put in a closed box covered with a cloth. The plate revealed a photo larger than the specimen. The photo placed in the front of the photo-electric cell made the pendulum react as if the lamp were there !

The writer suggests that the underlying principle may explain such things as dowsing on photographs.

Table Pendulaire, by A. Boitelle. This is a disc marked with graduated concentric circles or arcs marked " Tension," " Temperature," " Vitality " and " Weight." Given absolute detachment on the part

of the radiesthetist information on these heads will be correct. The pendulum at a length of 15 cm. is held over the disc on an oriented table, the bob one cm. above the middle of the disc. The operator's left thumb is placed on the radial artery of the left wrist of the client sitting opposite. The operator reads out the four headings in turn and notes the pendulum's indications on the appropriate scale on the disc. A.H.B.

RADIESTHÉSIE POUR TOUS

November, 1949

p. 323. Effects of pyramidal forms. On this subject, dealt with in a previous article, Alex Dubourg questions statements as to the orientation of the pyramid for obtaining the highest radiesthetic potential (when mummification can be expected to occur). Several persons (he writes) have found that, contrary to former assumptions, certain pyramidal dimensions give values of potential which diminish as the surface of the pyramidal model exposed to the north is increased. M. Dubourg himself has not been able to obtain mummification when using just any pyramidal form, but where a model is made proportional to the pyramid of Cheops, mummification can be obtained, whatever its height. Three operators mentioned have had disappointing results with pyramids of 35 to 50 cm. height, whose dimensions were not proportional to those of Cheops, but 34.08 or 48.90 cm. are " harmonic " heights, which " without doubt " would have modified the results.

p. 325. The Peyré radiation, by M. G. Lemarchand. This radiation has been known for about 12 years. It has been stated that the surface of the earth is marked out by a wide network of harmful influences in the form of parallel bands, presenting the approximate outline of an immense chess-board, each square having an area of 20 to 25 square metres. The outline is easily detected by the pendulum. The pendulum, having been regulated to gyrate positively on the sympathetic nervous system, reveals by negative gyrations the zones affected by the Peyré radiation. These influences are discernable not only on the surface of the ground, but at all heights of buildings. They have a very bad effect on the health of those exposed to them. Observation of the harmful zone of the Peyré radiation gives the impression of a continuous flow. That is to say, the pendulum, held in a relatively confined zone (one or two metres), turns negatively, but begins oscillating if one moves in a certain direction. By analogy with the pendulum reaction above running water, it is logical to hypothecate a flux flowing in a definite direction. It is said that printed paper, such as newspapers in several thicknesses, appears to provide on its vertical a screen of these radiations. But in time the paper loses its effect and must be replaced. The paper must cover the whole of the zone to be protected.

p. 327. Dr. J. Jarricot considers extra-sensory perception from the point of view of radiesthesia.

p. 332. A. L. Cotte describes a protractor which he has found useful for radiesthetic use. It consists of a circle of aluminium of

about 70 mm. in diameter, contoured in relief at the circumference. At the centre a hole of 10 mm. diameter is pierced, on which witnesses can be placed. On the circumference the numbers from 0 to 11 are marked, starting from zero on the left-hand side, the zero mark being indicated by a heavy horizontal black line. The numbers are shown in black on a bright glossy foundation.

p. 333. Henri Meier gives a number of examples of teleradiesthesia. To mention just one, a M. Damming, of Belvaux, had been declared dead on the field of battle. His brother brought to the author three different photographs. In each case he declared that M. Damming was alive in Russia, even when using a photograph reproduced for the service of the dead. The missing man eventually turned up from Tambov.

p. 335. Disimpregnating the pendulum. For the benefit of beginners it is stated that, in carrying out a pendulum test, the pendulum becomes impregnated with the influence of the object tested, and for that reason a series of tests may give unsatisfactory results, unless the pendulum is disimpregnated between each test. This can be done by suspending the pendulum with one hand and touching its lower end with the other for almost a minute. On similar reasoning, objects tested on a table should each be placed on a separate piece of thin paper. Some radiesthetists prefer black cloth, as this hardly becomes impregnated at all and can be used over and over again. For rules and discs (i.e., protractors), the simplest method of disimpregnation is to run the hand over the instrument as if dusting it, either from the right or left side (it does not matter which). It is not necessary for the hand to touch the rule or disc, but it should pass slowly over it a few millimetres from its surface. A warning is given about activated sulphur. Sulphur amplifies radiations, but if it absorbs radiations, it does not disimpregnate an object. It can produce many errors because it transfers the influence of one body to another. It is best for the novice not to use it. But being an absorbent, it can render great service, provided the necessary precautions are taken.

p. 337. F. Servranx considers the Ego of man from the occult and radiesthetic points of view.

p. 341. Hubert Louel continues his discussion of errors and misconceptions in dowsing, taking into account mental orientations.

JANUARY, 1950

p. 1. J. Charloteaux describes how the subterranean river of the Corbel Grotto on the Franco-Belgian frontier was prospected by a magnetic instrument of the author's and by radiesthetic methods. The instrumental results were often adversely affected, due (in the opinion of M. Charloteaux) to the Aurora Borealis. The unexpected conclusion reached was that the divining rod and the pendulum proved superior to "scientific instrumentation."

p. 5. G. Noël continues his observations on mummifying effects of pyramids, following articles by Messrs. Dubourg and Martial. He then describes at length phenomena of raised radiesthetic potential which, he says, "radiesthetic multiplication" (i.e., a rule method of measuring this potential, apparently similar in principle to the Bovis system) alone can explain. He showed in a previous article how a

tingling sensation could be felt on the palm of the hand by holding a suitable pointer towards it with a pre-determined orientation, or by holding the hand palm downwards over the apex of a model pyramid. In attempting to elucidate this phenomenon he took a shallow transparent quartz cupel, or dish, and filled it with 20 cc. of distilled water. A bar magnet was then arranged in a North-South direction with the north pole of the magnet pointing to magnetic north and the south pole directed towards the dish, and a few millimetres from it. He then placed the dish of distilled water on his rule and took readings at intervals with the help of the pendulum. At first the water gave a "neutral" reading, i.e., without raised potential, but at the end of an hour a reading of 18 (the scale was apparently one of centimetres) was obtained. After 12 hours' exposure to the influence of the magnet the reading had gone up to 46. By contrast with a body charged with electrons, as for example quartz crystals, it is seen that the water is charged with electrons (suppression of "multiplication," or, as we can say, of "potential"). The same experiment was then carried out, but with a thick glass jar instead of the cupel, and it was found that, whatever the length of exposure, no rise in potential took place. As we shall now see, the author goes on, the nature of ordinary glass is opposed to "electrification" of the water. To demonstrate this, the author placed a fine copper wire over the neck of the jar with one end descending into the water inside it and the other hanging outside with its end just in line with the south end of the bar magnet, which remained in its natural north-south position. The water was then found to increase in potential as the time of exposure increased, the readings being 8 after 15 minutes, 18 after 1 hr. 15 min., 21 after 1 hr. 30 min., and 24 after 1 hr. 45 min. The corpuscles determining the "activity" (one prefers the word potential) of the water, says the author, have been conducted along the external conducting wire to the water. If the experiment is repeated with a vase of ordinary glass, even with very thin glass, but without the conductor, the potential of the water does not change, or at least it changes only very slowly. Numerous other experiments along these lines are described and certain remarks by way of conclusion made. It is stated that when the activated water is diluted by an equal quantity of distilled water, the degree of activity, or potential, of the mixture as measured on the rule falls by half. This fact serves to rule out any possibility of suggestion. Activisation can equally be produced by the *fluide humain* or, as we might say, human radiations, well known to radiesthetists. Activating water in the quartz dish by means of the hands showed that the right hand has greater power in this respect than the left, the potential of the distilled water rising until saturation point is reached. The author goes on to discuss the employent of radioactive products in the activisation of water.

p. 15. In this article G. Van Lerberghe describes simple methods for obtaining blood pressure, the degree of disturbance in health, suitable remedies, and a measurement for intelligence and character, by means of the pendulum. The psychic aspect of dowsing is implicit in the method.

p. 17. G. Lemarchand shows how geological surveys can be carried out radiesthetically. A method he describes is to divide a map of

the ground to be prospected into small squares, orientate the map accurately and prospect each square in turn with the pendulum, using witnesses of the principal rocks. In each test the string-length of the pendulum should be accurately adjusted to the radiation of the witness in question. Each test will be improved by placing the index finger of the left hand on the witness to which the pendulum has been previously adjusted.

p. 19. Human Radiation Detectors. By A. Dubourg. In a work on human radiations Dr. Creuzé divides detectors into four categories, viz., electric detectors, magnetic detectors, photo-electric detectors and biological detectors. If one adds photographic, mechanical and electro-magnetic detectors, one has seven principal classes of instruments as utilised to-day, but with variable results. The author examines briefly these different detectors, and says that the electric detectors are the most numerous and also the most easily adapted to meet all conditions. They are generally based on the principle of ionisation of the ambiant air in the presence of mitogenetic (of living matter) radiations. The air becomes increasingly a conductor of "electricity" under the effect of an emission of biological radiations. The author goes on to describe the *Détectofluid*, which has an electrical circuit comprising a high-tension battery, a micro-amperemeter, a condenser, and a potentiometer graduated from 0 to 100. From tests which can be made with the *Détectofluid* it is concluded that there exists in us physical forces which are apparent and measurable; these forces can respond to a certain degree to the will of the operator. It is difficult to relate these human radiations to the range of known wavelengths. It is asked why we should wish to pin-point within the framework of our knowledge the nature of the human radiations of which the primary source is still unknown to us. Is it not better, it is asked, to consider human radiations simply as one of the multiple effects of vital function? Our ignorance of the relationship between physical and mental processes are still great, as Dr. Carrel has pointed out.

p. 29. This is an article based on one by M. Pierre Masaire, which appeared in *Le Petir Marocain* on October 18th, 1949. It tells how tunny fish have been detected from a chart of the sea off Agadir. The operator holds a piece of tunny in the left hand and an ordinary lead pencil in the right hand. The minutes pass, and then suddenly the pendil finds a point on the chart. There is a prickling sensation, the pencil rises, and the prickling sensation is felt again in the right hand. The points where the pencil produces a prickling sensation cover a small area on the chart. The tunny fish are there! Then again the radiesthetist can help to find the tunny when at sea. Despite the rolling of the boat he sits on a box right forward. With a small piece of tunny in one hand, he holds out his other hand and seems to capture these mysterious radiations. Very pale, with his hand pointing towards the sea, he turns slowly. Then his hand quivers slightly. Some miles away the water is seen boiling up. There are the tunny. The direction indicated by the radiesthetist was the right one.

DECEMBER, 1949

p. 358. Magnetism and pseudo-magnetism. By M. G. Lemarchand. The radiesthetic characteristics of symmetrical and non-symmetrical

bodies lying on a flat surface are classified according to their orientation, and their characteristics are discussed. The body is said to reside either in a magnetic or pseudo-magnetic field. The phenomenon of remanence is said not to exist in a pseudo-magnetic field. It is concluded that the so-called pseudo-magnetic field is none other than a manifestation of the field of terrestrial magnetism. It appears to be independent of the nature (diamagnetic or paramagnetic) of the body concerned.

p. 360. Mummification by pyramidal forms. By Pierre Bories. The following is pointed out concerning the dimensions of the Great Pyramid. According to *Science Mystérieuse ćes Pharaons*, the Egyptian priests decreed that the relationship between the height and the base was such that the square of the vertical height exactly equalled the area of each of the triangular surfaces of the pyramid. The author goes on to say that, following this, it is easy to show that in a triangle bounded by the vertical height, a line drawn from the vertex to the mid-point of one of the base-lines and the third side (equal in length to half a base-line) this third side is equal to the projection of the vertical side on the hypotenuse. Also the height of the Great Pyramid divided by the length of one of its edges (148.20 m./221.50 m.) is equal to 0.66, which is the proportion of water to one unit by weight of the human body. In other words, approximately 66 per cent. (a French author is quoted as giving it as 64.5 per cent.) of the human organism is water. The question is asked whether the Egyptians knew this. At any rate, these pyramidal dimensions are apparently supposed to be connected in some way with the mummifying properties of the Great Pyramids. The author goes on to describe the powers some persons have of mummifying meat, &c., with their hands, and he says that there are certain soils, vaults and grottos which will mummify organic bodies placed in them. He constructed a model of the Great Pyramid in cardboard to a scale of 1 in 2,000 and by placing in turn the bodies of animals, animal organs and plants under the pyramid, found he was able to mummify them. For instance, a sheep's heart, weighing originally 90 gm., weighed 25 gm. after being 40 days under the model, the dehydration being about 70 per cent. When placed under the model the heart still contained blood, which did not affect the mummification in any way. The pyramid, the author concludes, appears to have no action on liquids other than those contained in animal tissue. In his experience orientation of the pyramid played no noticeable part.

p. 368. Radiesthesia and fluctuations of nervous potential. By A. Dubourg. The nervous system and blood circulation are closely allied to radiesthetic ability. Excitation of the former affects the latter. Following the idea of an engineer, Du Dourg, of Bozas, an instrument called a *Détectofluid* has been made for measuring nervous potential. With this instrument it is possible to measure the degree of activity of the "human fluid," essential for all radiesthetic prospection. This is an emanation from the body which has its origin in the nervous system and in the blood. The rate as shown on the *Détectofluid* is increased by physical exercise or by the taking of drugs. Some radiesthetists have advised the taking of drops of Guaco (Climbing Hemp Weed) in mother-tincture doses or a homoeopathic dilution of

gold or even radium before making a prospection over the ground. Without going so far as to take a homoeopathic preparation of what is being prospected for in order to become more sensible to its radiation, it is true that the ingestion of certain products assists in radiesthetic research. Caffeine, for instance, accelerates the movements of the heart, excites the nervous system and sensitises it, just as it stresses it. Nicotine has a violent action. Alkaloids also augment considerably the emission of the human fluid.

p. 371. W. Servranx examines the radiesthetic properties of wax and refers to its use in magical practices.

p. 375. This article on the choice of a pendulum is written for the beginner. Apart from special pendulums a round pendulum is considered best for physical researches, a cylindrical one for " mental " or psychic work and a pointed one for map reading. A black or white pendulum is best for beginners (white is ultra sensitive, black more accurate), a green pendulum is very good for out-of-doors prospection, and a yellow pendulum is good for laboratory work. Either a thread or chain can be used with the pendulum. Not so sensitive people may prefer thread (black or white, or the colour of the pendulum).

p. 377. Anomalies found in pyramidal mummification. Jean Martial finds that his mummification experiments have not always tallied with those of M. Noël. A test is described wherein three oranges were exposed simultaneously to pyramidal radiation, the results in each case not being the same. A table is given of the correct dimensions for scale models of the Cheops Pyramid for heights ranging from 1 cm. to 100 cm.

p. 380. F. Servranx describes the construction of an *ampli-radiomètre* and discusses the general theory of amplifiers. He suggests a round box in aluminium with a diameter of about 65 mm. and height of 20 to 25 mm. Fill it with Borax powder (about 50 gr.) without pressing it down. If possible (this is not essential), before shutting the box, rub the interior of the lid with iron powder so that traces of it are left, and shut the box. With this amplifier the author goes on to show how it can be used in various ways, such as finding the depth of a stream, classification of bodies and evaluating their energy and polarity characteristics, and also radiesthetic tests over great distances.

p. 383. Hubert Louel continues his discussion on errors in radiesthesia.

BOOKS AND APPLIANCES

The Editor will be glad to receive old copies of B.S.D. Journals, especially of No. 54, and of English books on dowsing.

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Mumetal rods for depthing can be obtained from the Telegraph Construction and Maintenance Co. Ltd., Telcon Works, Greenwich, London, S.E.10, for £3 17s. 6d.; delivery in 10 to 12 weeks.

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Messrs. Devine & Co., St. Stephen's Road, Old Ford, London, E.C.3, supply whalebone strips 12in. long of the following sections at 5/- per pair:

Flat	.. ..	7 mm. x 2 mm. or 3 mm.
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All prices post free in U.K.

* * * *

The "Link" divining rod described by Mr. Guy Underwood in his article on Spirals and Stonehenge (*B.S.D.J.* 62, Dec., 1948) can be obtained from him at Belcombe House, Bradford-on-Avon, Wilts, price 8/- post free in U.K. Reprints of this article are available at 2/- each. Reprints of 10 Essays and Lecture, 15/- the set

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Delawarr Laboratories, Raleigh Park Road, Oxford, supply the new Continental Model Diagnostic Instrument at £75, including all Detail Sheets and Rates; tuition is given at 2 guineas per lesson.

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Copies of *Dowsing* by Pierre Béasse can be purchased from the Markham House Press Ltd., 51 Kings Road, S.W.1, for 12/- post free. The Schumfell radio-magnetic detector described in the book can be purchased by members from the author, 37 Rue Rossini, Nice, A.M., France, at a reduced price of £2 6s.

* * * *

The following books are for disposal by Mr. H. M. Sparrow, 152 Torquay Road, Paignton, S. Devon :—

Structure and Surface, a book of field geology, by C. Barrington Brown, price 12/-.

Structural and Field Geology, by James Geikie, price 15/-.

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The *Electronic Medical Digest*, published quarterly by the Electronic Medical Foundation, San Francisco, can be obtained through the Biotechnic Press Ltd., BCM/Biotechnic, London, W.C.1, at 19/6 per year.

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La Revue Internationale de Radiesthésie, which contains contributions from many countries on all aspects of Radiesthesia, and is issued every two months, can be obtained at Editions Palatines, Grand' Place, Mettet, Belgium: subscription 250 Belgian francs per annum.

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Radiesthésie pour Tous can be bought at The News Stores, 10 Coptic Street, British Museum, London, W.C.1, at 2s. per copy.
Twelve consecutive copies can be ordered through Mr. Noel Macbeth, Moulsham Mill House, Chelmsford, Essex, for 18/-.

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Members requiring any of the books or appliances mentioned above should apply direct to the address given, and not to the Assistant Secretary.

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